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COURSE OF

LECTURES ON THE BLOOD,

AND ON

THE CHANGES WHICH IT UNDERGOES DURING DISEASE,

Delivered at the College of France in 1837-8,

BY

M. MAGENDIE.

LECTURE I.

Mode of studying medicine.—Defects of pathological anatomy, as at present studied.—Necessity of searching for the cause of disease.—Importance of an examination of the properties of the blood.—Mode of production of pneumonia, fever, &c.—Pathology of phthisis exemplified.—True method of advancing the science of medicine explained.

GENTLEMEN:—I always hail, with lively satisfaction, the period of our annual meeting; but upon the present occasion I feel even more than ordinary pleasure, for the recollection of the important and unexpected results, which we were fortunate enough to obtain last year, justifies me in the hope that our future researches will be equally productive, and a new impulse thereby given to the study of medicine. It is surely not going too far to assert, that the manner in which we explained the origin and *mechanism*, if I may so speak, of various diseases, is of a nature to clear up, in no contemptible degree, the mysteries of pathology, of that science which cannot be said even yet to exist; for I set but little value on the minute examination of the traces left by disease on our organs, though that pursuit has been pompously styled pathological anatomy. Are you not, in truth, convinced,—you who have many a time ascertained the fact for yourselves,—that the lesions found at our autopsies are frequently produced after death, and that consequently the plan hitherto followed in such inquiries is fallacious, and can only lead to vague information and error? It is not a little remarkable that, at a period when the *positive* is sought in every quarter, the study of a science so important to humanity as medicine, should be almost the only one characterised by uncertainty and chance; be it ours to strike out a new path. The *effects* of diseases have long been studied; let us search for their *causes*, study them one by one, and this done we shall, perhaps, be enabled successfully to modify their injurious effects. This, believe me, should be the end of all our efforts. The task is no holiday one, it is true, for nothing is so difficult to eradicate as absurd notions generally adopted, and there are many such that corrupt the existing theory and practice of our art. But, Gentlemen, the more difficul the more honourable the attempt; and even if we do no more than put our successors in the right way one day to complete the work, we will feel satisfied that we have ourselves been no unworthy labourers in the field.

You have often heard me raise my voice against the defective character of the existing system of medical study. Like me, too you have no doubt been struck with the trifling good that study confers on society. But could it be otherwise when there is scarcely a sound idea on physiology abroad? when anatomy is learnt in a hurry and forgot with still greater speed; when those sciences, which though called *accessory*, are no less of first-rate importance in a plan of medical education intended to prove practically useful, namely, physics, chemistry, natural history, mathematics, &c., are generally neglected! To illustrate the importance of physics, I need only remind you that to its laws are to be referred a crowd of phenomena, incorrectly styled *vital*. You will recollect, among other things, how, by the help of some of the principles of hydraulics and mechanics, we succeeded in simplifying the study of the circulation, which formerly required for its explanation such a complex train of chimerical hypotheses. Compare the results of the experiments we have made in common with what you find in books, and you will see how widely the imagination may lead the understanding astray. Beware, Gentlemen, of the fanciful creations of writers, no matter with what ingenuity they are dressed up. Devote yourselves, on the contrary, to experimental study,—*see, touch for yourselves*,—take no

one's word for anything,—mistrust yourselves, mistrust me, and you will manage to steer clear of the whimsical conceptions brought forward to explain, some way or other, the frequently inexplicable phenomena of organisation.

I am anxious to recall your attention to the experiments we made last session on the blood. You learned through them the influence that fluid exercises on our organs. You saw me produce at will, in animals, the majority of the striking phenomena determined by the most terrible diseases, for the relief of which art is powerless. You saw me give *rise*, at my pleasure, to pneumonia, scurvy, yellow fever, typhoid fever, &c., not to mention a number of other affections which, so to speak, I called into being before you. And here, Gentlemen, we will especially employ the aid of organic chemistry. Feeble though its light may be, we will strive, by its help, to discover the intimate composition of the blood in the normal state; the changes it undergoes, the impressions it receives, and the disorders it conveys into the economy when variously modified. The paramount importance of such inquiries must be admitted by all; for, I would ask, wherein lies the difference between the medical practitioner and the nurse at the sick bedside? Suppose them engaged with, for example, a case of variola. In the course of his studies the former has attended clinical practice, and has learned the symptoms and terminations of that disease; he knows, admirably well, that it is ushered in by certain general phenomena, which are followed by a peculiar eruption of a certain duration; that the pustules formed dry, and that desquamation closes the scene. Very true; but do you imagine that the nurse, provided she be habituated to her calling, does not know all that quite as well as he? Will he be able to tell me a whit more correctly than she, why the case of variola before him will prove confluent or benign? Or why the skin, suddenly assuming a purple colour, the sufferer is carried off in a few hours? No; the most skilful and experienced practitioner knows nothing of all this: then he stands the ignorant and too often powerless spectator of such modifications as those of the primary disease. All he can do is to order certain remedies which, if necessary, the nurse could prescribe equally well. Is this the sort of superiority to which it is the province of the physician to aspire? That in the present condition of the science it is the sole one, cannot be denied. Let it be our business, Gentlemen, to cast away the humiliating part our predecessors have left us to play. But how is this to be done, you will ask? I answer, by creating *experimental medicine*, which, aided by our present extended knowledge of various sciences, will doubtless reveal the mechanism of morbid changes, and thereby render it possible for us to attack vigorously, to modify, nay, to prevent the causes of those changes. Such is the manner in which I view the aim and plan of our studies; nor do I believe that a more rational system of inquiry, or one so likely to prove fertile in results, has at any period been laid down.

Our former experiments on the nature of the blood are daily confirmed by cadaveric examination. A woman, labouring under the prodrome of an acute disease, was recently brought to my wards at the Hôtel-Dieu: I diagnosticated variola. The same day, though the orthodox treatment was duly employed, she suddenly grew worse; the surface assumed a purple hue, and death supervened in thirty hours.

I have already spoken to you of this terrible complication of small-pox. But in this particular case the symptoms were so rapid in their course, and death so unexpectedly sudden, that several of the people about the hospital were terrified, and declared the patient had perished of the plague. I was naturally curious to compare the phenomena disclosed in the dissection of this woman with those produced in the artificial diseases I am in the habit of creating in your presence. The result was, that I found the resemblance between them so perfect, that one might have fancied the patient's death caused by the very means I employ in my experiments on animals. In pneumonia, again, you have a new proof of the evident part the blood plays in the production of morbid disorders. Writers, even from the earliest times, have described that affection. You are well acquainted with its prodromata, its periods, its termination. But what is its first cause? what actually goes forward in the lung in order that in one instance we shall find engorgement, in another *red* or *gray hepatisation*? These terms strike you as ridiculous, and excite your smiles. I am, however, compelled to use them in order to speak the language of the schools, which, loaded as it is with false and grotesque comparisons, cries aloud for reformation. But to return to the pneumonia. The parenchyma of the lung is, in some cases, hardened, softened in others, and is rendered totally unfit for carrying on the functions of respiration and circulation. I have frequently explained to you the mechanism of these changes. At present I shall merely, in a summary manner, say that, through a chain of chemico-physiological phenomena, now in great part understood, the blood becomes extravasated in the labyrinth-like pulmonary canals, coagulates, becomes solid, and produces the various disorders you have many a time noted. These disorders, which are always nearly identical, cannot be accounted for otherwise than as I now explain them. I attach great importance to this point, because a multitude

of pathological cases are referrible to it. It is thus we produce, at will, what is called gastro-enteritis and typhoid fever; the redness and other changes in the intestinal mucous membrane, every characteristic, in short, of those diseases, is imitated with strict accuracy.

These positions acquire new importance from my having been enabled, since last session, to make some very curious applications of them. Take, as an example, malignant pustule. That frightful disease, in which inflammation is said to play so important a part, coincided in the case of a subject who died a short while past of it at the Hôtel-Dieu, with non-coagulability of the blood. All my researches have, indeed, invariably demonstrated that the property of clotting possessed by that fluid is an indispensable condition for the free and regular continuance of its movement in the capillary system; and it is some modification or other of this condition that causes the frequency of death or diseases attended with the appearance of petechiæ, such as the plague, typhus, variola, scurvy, &c. Our attention will, therefore, be directed to the investigation of the causes that may act mediately or immediately on that property. It will require but little thought on your part to form a conception of the deep interest attached to such inquiries, not only as respects pathology, but the well-being of humanity. We are already acquainted with a great number of solid, liquid, and gaseous substances that destroy or weaken the coagulability of the blood; we will now endeavour to discover such as increase its energy, which I do not believe to be impossible.

Be persuaded of this, Gentlemen, that the truly scientific mode of studying medicine lies almost wholly in investigating the manner in which morbid changes are produced. We have already succeeded in elucidating it in the case of several diseases, and beyond a doubt we shall be enabled to increase their number. Look at pulmonary phthisis for example, there is an affection which you see day after day cutting off individuals of every age, of every sex, and of every rank, yet none has been more carefully studied on the old plan, none has proved a more fruitful source of dogma and disquisition. Eminent observers have described all its phenomena, even to the minutest details. But what is all this description but so much natural history; will it throw any light on the treatment of the affection? Not a particle; but we hope for enlightenment in this respect; we must learn the *cause* of the disease; nor need we despair of discovering it. Perhaps tuberculous matter may be detected in the blood, and, as a further step, the means of destroying it, or preventing its formation, ascertained. Hear a fact well suited to give confidence to our hopes. We know, in the first place, that tuberculous may be accurately distinguished from purulent matter under the microscope. Now, within the last few days, in examining the body of a woman who died of phthisis, I found among the pillars of the right ventricle of the heart certain bodies resembling a sort of fibrinous sac, and containing a fluid like the pus of a phlegmonous abscess. I carried the part home and satisfied myself, by microscopical examination, that the supposed pus was, in reality, tuberculous matter; it is clear, therefore, that it existed in the blood, but whether its presence there was the cause or the effect of the phthisis, is a question for future investigation, of which we shall not lose sight; and this important fact does not stand alone. The practice of the Hôtel Dieu daily furnishes similar ones, which give new strength to my persuasion that we shall find in the blood the cause of a host of diseases, and in every instance a fresh source of instruction.

The poverty of the science as regards all these fundamental questions perhaps surprises you; but it will cease to do so if you reflect for a moment on the scientific character of the profession. Medical men may be divided into two classes; those forming the first give up all study the moment they leave off attending lectures; they quite conscientiously believe, and frequently succeed in persuading others, that they understand every disease, and can cure every variety of suffering; these gentry occasionally realise a handsome fortune, but I must say they do so at the expense of science and of the interests of their fellow men. Their numbers explain to my mind marvellously well the discredit into which medicine seems to have fallen at the present day, and the high favour lavished by the public on quacks of every grade. The second class of practitioners continue, it is true, to follow clinical pursuits with zeal, but some among them, misled by scholastic errors, retard rather than accelerate the progress of the science. Against one of those errors I have waged war ever since I took upon me the duties of a teacher,—a fallacy which is the more injurious because it seems supported by some specious argument, which, nevertheless, I shall not now discuss; I allude to the assertion that there is nothing in common between the phenomena of living bodies and those of inert matter; not that I wish to ascribe to the latter more than belongs to it, but my devotion to the cause of truth induces me to bring forward everything that may in any wise facilitate its discovery. In illustration I may remind you of your having seen how certain phenomena, as those of imbibition, of permeability to gases, &c., take place in organised and living membranes exactly in the same manner as in inert bodies.

It were much to be desired that persons engaged in medical research would, on all

practicable occasions, make use of instruments fitted to estimate the strict value of the results obtained. The advancement of all the other sciences has been effected through the gradually increasing perfection of their means of observation; why should it not be the same with medicine? In several of our experiments last year we had occasion to employ an ingenious instrument invented by M. Poiseuille for ascertaining the precise pressure of the blood, and the force of impulsion of the heart. The results were scarcely credible, and have overturned all theories that might have been previously held on the subject. Among other facts M. Poiseuille has established, by means of the hemodynamometer (for so the instrument is called), that the static force is equally energetic in two animals exceedingly disproportioned in size—a horse and a rabbit. I myself made an experiment with the instrument on two dogs of equal size and strength; I injected the greater part of the blood of one into the veins of the other, and found that the variation in the pressure amounted only to a few millimetres. Now, no matter how surprising these results may be, they are incontestable, and, indeed, the solution of what at first appeared inexplicable was thereby rendered extremely easy. Here it is: any notable diminution of the quantity of the circulating fluid increases the number and force of the heart's contractions, while a superabundance of blood produces a contrary effect. Hence it may be laid down as a principle, that the number and force of the heart's pulsations are in the inverse ratio of the quantity and pressure of the blood; this increase in the frequency and power of the heart's contractions, when the organ is nearly deprived of blood, may be compared to the acceleration of the movements of a watch caused by shortening its balance. These facts show how much might be said on the effects of bloodletting, and what a novel view might be taken of the theory of that operation. At a future period we will reconsider this subject; for the present, suffice it to say that the removal of blood by venesection inevitably modifies the contractility of the heart.

Every question brought before you will be examined in its physical, chemical, mechanical, and vital bearings, for life is the result of these different modes of action. I propose devoting a considerable number of lectures to the study of the blood, for I am acquainted with no subject more deserving of attention. We will study it not only in chemical apparatuses, but in the living animal and in the human subject labouring under disease; we will endeavour especially to ascertain by what series of transformations its renewal is effected through the chyle, the materials of which, when examined separately, are found to bear no analogy to the proper constituents of the blood. Our attention will also be directed to the globules of the blood, which certain physiologists classify as animals of the tribe infusoria. We are already acquainted with their form, and the manner in which their movements are effected. We shall pursue our inquiries relative to them by examining the modifications, if any, to which they are subject. M. Turpin has lately asserted that the globules of the milk belong to the vegetable kingdom. It will be worth our while to determine whether or not any close relation may be shown to exist between these globules and those of the chyle or blood.

ESSAYS IN SURGERY.

By J. M. COLEY, *Esq., Senior Surgeon to the Bridgnorth and South Salop Infirmary.*

No. I.

PHLEGMONOUS ERYSIPELAS.

THE nature and improved treatment of this disease are now so generally understood, by the writings of Mr. Copland Hutchinson and Mr. Lawrence, that it may appear needless to occupy the attention of the profession any further on the subject. As, however, the cause of the malady has been almost exclusively referred to external injury or irritation, as a lacerated wound, *puncture* of of some fascia, or other fibrous structure, &c., it may not be uninteresting to adduce facts to prove that it may be occasioned by cold, and that it is also subject to endemic influence.

Although Mr. Hutchinson was aware that it was frequently produced in the navy by the moisture and sudden alterations of temperature to which sailors are exposed, yet he appears to believe that the external irritation of salt and friction combine to promote the affection, as the following passage implies:—

"The lower extremities being the parts most subject to the attacks of this disease among seamen may, in some manner, be attributed to their legs and trowsers being more frequently immersed in *salt-water* than other parts of the body, and the constant irritation produced by the friction of such coarse materials as usually constitute the dress of sailors upon the naked skin."*

Mr. Lawrence, to whom surgeons are indebted for the satisfactory manner in which he has confirmed the superiority of Mr. Hutchinson's mode of treatment, appears to suppose that it arises, almost exclusively, from external injury, or the sudden suppression of the discharge from an ulcerated surface.

"Phlegmonous erysipelas is more commonly idiopathic; it supervenes on the wound of venesection, on injuries of the su-

* Some Practical Observations in Surgery. By A. C. Hutchinson, 1816, page 79.

perficial bursæ, as those of the patella and olecranon, on incised and lacerated wounds, and compound fractures. An inflamed state of ulcers, especially in the lower extremities, is a common cause of it; this frequently comes on when large ulcers, or extensive wounds, are healed rapidly in persons confined to bed, and allowed a full diet of meat and beer. It has often been produced by wounds received in dissection."*

The manner in which cold appears to operate in producing phlegmonous erysipelas, is by paralysing the capillary circulation and inducing congestion, and ultimately coagulation of the blood; and the series of results which follow the loss of vitality in the capillary vessels, so accurately described by Gendrin† in this work on inflammation, are readily discoverable in the progress of this disease in the cellular membrane. When incisions are made into this structure, soon after the attack commences, the gaping wounds present a dark crimson colour, and the coagulated condition of the blood, which is the cause of this appearance, is distinctly observable. As the inflammation advances the sections afford a gray aspect, which is produced by the separation of albumen and coagulable lymph, and the partial disappearance of the colouring matter of the blood. Lastly, when openings are effected, after the purulent stage is complete, a mixture of pus and serum may be seen oozing from the disorganised cells, and all appearance of blood is lost, except that resulting from the division of arteries, which have escaped the destructive process.

Before I proceed to trace the origin of phlegmonous erysipelas to the application of cold, it may be necessary for me to premise that the disease consists in a diffuse inflammation of the skin, terminating, when violent and unrelieved, in suppuration and destruction of the subjacent cellular, adipose and aponeurotic, or fibrous structures. That it may be produced by cold or moisture, independently of external injury, or saline, or other irritation, is proved by the following cases:—

Case 1.—1831, Feb. 12. S. P., was occupied early all the day in rendering assistance to passengers in one of the streets in this town, which was inundated by the river. While thus employed his feet and legs were immersed in the cold water without any covering, and no external injury was sustained from accident or friction. On the following day he was attacked with phlegmonous erysipelas in the integuments of the knee. The disease increased to such an alarming degree that it was considered expedient to consult me on the case. I found the upper part of the leg, the knee, and the thigh enormously swollen, of a brawny hardness, and deep red colour, which appearances were more prominent in some parts than in others. He had fever and delirium.

I made several free and deep incisions through the skin and cellular membrane, which were followed by a discharge of blood, mixed with serous and purulent matter. The next day the swelling was greatly reduced, the fever subsided, and the delirium entirely ceased, and from this time recovery rapidly proceeded.

Case 2.—Miss P. consulted me on Feb. 15, 1838. About a fortnight before that time she was suddenly desired to see her mother who was ill in the night, during an intense frost. Not waiting to dress herself, she walked about the house a considerable time without stockings. An inflammation in the right leg followed, and, when I visited her, I found the back part of the leg inflamed with phlegmonous erysipelas, which was proceeding upwards. The next day the skin was more hard and dark-coloured and painful, and the inflammation was extending with astonishing rapidity along the thigh.

I divided the skin and subjacent adipose substance, to the extent of three inches in fourteen parts, and on the following day repeated the operation at the upper portion of the leg, the disease having again increased during the night. By these means the pain, swelling, and redness were relieved and recovery soon succeeded.

In some instances cold seems to co-operate with inflammation previously existing in establishing phlegmonous erysipelas. Thus, exposure to cold, especially at certain seasons, will be followed by this erysipelatous affection during the suppurative inflammation in the cyst of a diseased tooth, or after the opening of other cysts, or after some puncture or wound has been inflicted, as the wound of venesection or the incision of the scarificator.

Case 3.—1807, Dec. 25. Mr. J. D. consulted me respecting a phlegmonous erysipelas in the integuments of the lower jaw, occasioned by exposure to cold. It had been preceded by suppuration in the diseased periosteum of an adjoining tooth. On the 31st the inflammation had extended so much that I was desired to visit him. The peculiar induration, and deep red colour of phlegmonous erysipelas had occupied the whole of the neck on the side originally attacked, as far as the clavicle, and low fever with muttering delirium was present. The treatment by incision not having then been made known, I punctured the integuments, where the disorganisation of the subjacent parts appeared most severe, and thus rescued my patient, notwithstanding the entire destruction of the platysma myoides.

Case 4.—1831, June 27. W. T. had been suffering during the last week with phlegmonous erysipelas on the cheek, which had proceeded from cold, and had been preceded

* Medico-Chirurg. Transactions vol 14.

† Histoire Anatomique des Inflammation. Par A. N. Gendrin. Paris, 1827.

by an aphthous ulcer on the inside of the upper lip. The mucous membrane of the cheek was now occupied with what the French call *muguet*. The cheek was amazingly thickened by the inflammation in the cellular membrane, and great external heat and redness prevailed, which extended to and closed the eyelids, and disfigured the ear and throat. He had delirium and a rapid pulse, and had been twice bled without benefit before I saw him. Finding him in this perilous state, I incised the cheek in three places, taking care to avoid the transversalis faciei artery, and the parotid duct. The incisions presented a gray appearance, denoting a deposit of lymph and pus, and the advanced progress of the disease. The delirium continued till the fifth day after the operation, when a speedy recovery commenced.

Incisions should not be practised in the face, except in such perilous cases as the one just related, where the life of the patient is in imminent danger, as the marks left by them may occasion permanent disfigurement.

The following cases illustrate the endemic form which phlegmonous erysipelas occasionally assumes. The patients lived in the same street, and the same side of the street, and their diseases occurred nearly at the same time.

Case 5.—1830, July. A lady was attacked with phlegmonous erysipelas after venesection, and died in consequence of the disease. I did not see this patient, but was informed by the surgeon who bled and attended her, that every precaution had been taken to prevent such a result from the operation.

Case 6.—1830, July 29. A sister of this lady, residing in the same house, was bled three weeks ago by the same practitioner. On the following day inflammation appeared at the orifice, which gradually extended from the elbow to the wrist, and terminated in erysipelas phlegmonoides. The disease at length progressed with great rapidity, and a fatal termination, as in her sister, was apprehended. The surgeon, therefore, on the 27th, made several superficial incisions, which afforded some relief and evacuated a little pus and serum. An alarming extension of the inflammation having, however, taken place to-day, the surgeon requested my attendance at the town in which he and the patient lived. I cut through the skin and cellular membrane, with four long incisions, down to the fascia, and, where that was diseased, I divided it. A branch of the radial artery was wounded and required a ligature. The case was now left to the care of the surgeon in attendance, from whom I had the pleasure of hearing on the 31st that recovery was rapidly proceeding.

Case 7.—Before I had left the town in which these occurrences took place, an elderly lady, residing on the same side of the street, and at a short distance from the residence of these patients, consulted me on account of an inflammation in the capsule in the knee-joint. The remedies I prescribed consisted of scarification and cupping, an evaporating lotion, and afterwards a blister. Before this and the scarifications were quite healed, the patient rode a considerable distance in an open carriage, and took cold. Fever and superficial inflammation above the knee followed, and on August 15th I was requested to see her. I found that phlegmonous erysipelas had on the 12th attacked the leg, and extended all down the inside, and across the middle of it. She had nausea with frequent vomiting and confusion of mind. In the most diseased part the skin had acquired considerable tension and thickness, and the induration of the adipose substance was extreme. I cut through the integuments to the extent of about eight inches in five or six places. All the symptoms improved till the 18th, when the inflammation had appeared on the outside of the thigh, where I found it necessary to repeat the incision. On the 6th of September I had the satisfaction of receiving a communication from the surgeon informing me that the leg and thigh were quite well, and our patient's health restored.

The foregoing facts are, I trust, sufficient to prove that phlegmonous erysipelas is frequently, if not generally, produced by cold or a peculiar state of the atmosphere, and that an antecedent wound or other external injury is not necessary for its existence in all cases.

With respect to the seat of this disease, I am of the same opinion with Mr. Lawrence, viz., that it is chiefly situated in the cellular and adipose membrane, as may be seen by any one who observes the appearance of these structures immediately after the incisions have been effected. The cells, as I stated before, are found distended, first with coagulated blood; and, as the inflammation proceeds, with lymph and pus, the red colouring matter of the blood having mostly disappeared; and, lastly, complete disorganisation of the cellular structure is discernible together with the adjacent fascia, &c. Hence the following remark of Mr. Hutchinson is untenable:—"I have no idea, however, that the loose cellular structure of the adipose substance participates much in the inflammatory action of erysipelas phlegmonoides."—(*Prac. Observ. on Surg.*, p. 81.)

When the nature of this disease is ascertained, I agree with Mr. Hutchinson, that the sooner the incisions are made the more speedily will the patient recover; and the best guide for their locality and extent will be the situation and dimensions of the parts in which the inflammation predominates.

ON THE

CURE OF WRY NECK

BY

DIVIDING THE STERNO-CLEIDO-MASTOID MUSCLE BENEATH THE SKIN,

WITH CASES;

By Professor DIEFFENBACH, *of Berlin.*

Communicated by ERNEST DIEFFENBACH, *M.D., Hendon.*

(Concluded from page 14.)

CASE 13.—was that of a boy six years old, the son of a carpenter, with a contraction of the right sterno-cleido-mastoid muscle. The anterior portion only of the muscle was divided, and by this means the obliquity was removed. The bandage employed was the common one; the child was confined to bed during eight days; two days afterwards the cure was complete.

CASE 14.—Maria Schoenig, an amiable girl, 11 years old, affected with a congenital contraction of the right sterno-cleido-mastoideus, affecting, however, only the posterior portion of the muscle, was perfectly cured by division in twelve days. The dressing was the common one, and, as in the foregoing cases, no suppuration took place.

CASE 15.—Charles Von Schack, son of the Chamberlain Von Schack, of Mecklenburg, was born with a contraction of the right sterno-cleido-mastoideus. Everything had been done to cure him, but in spite of treatment the muscle could not be extended. I divided both the contracted portions, a difficult task, on account of the liveliness of the child. Some days afterwards a fluctuation from extravasation of blood in the wound was perceived; a strong compression, however, produced absorption. The boy became quite straight, and left Berlin in six weeks after the operation.

CASE 16.—Miss Roeser, 23 years old, suffered under considerable obliquity of the neck, towards the right side. I divided both portions of the sterno-cleido-mastoideus, which separated with a cracking noise. The usual dressing was employed; a little extravasation took place, but was soon absorbed.

CASE 17.—The subject of this case was six years old; I divided the anterior and posterior portions of the right muscle; and a fortnight after the operation the head was perfectly straight.

CASE 18.—The boy Moll, four years old, affected with contraction of the right sterno-cleido-mastoideus, was discharged a fortnight after the operation, perfectly cured.

CASE 19.—Jeshlin, 14 years old, was afflicted with torticollis in a great degree, so that the head almost touched the shoulder. The treatment, after the operation and simple dressing, was that usually adopted. On account of the great degree of obliquity it became necessary to turn the head to the opposite side soon after the operation. This gave rise to inflammation, and a large abscess formed. This was accompanied by fever, with nervous symptoms. The abscess was lanced, poultices were applied, and a simple treatment adopted, by which the fever subsided, and in six weeks the patient was perfectly well and straight.

CASE 20.—In a boy, aged eighteen months, from the country, affected with strong contraction of the right sterno-cleido-mastoideus, I divided the anterior portion of the muscle. A strip of adhesive plaster and a neckerchief were sufficient to effect a cure. This shows that in very young children even the pasteboard is superfluous.

CASE 21.—C. Kiesling, six years old, affected with strong contraction of the left sterno-cleido-mastoideus, was discharged perfectly well four weeks after the operation.

CASE 22.—A boy, five years old, was born with considerable shortening of the right sterno-cleido-mastoideus; the division of both portions perfectly removed the complaint. A fortnight after the operation no farther after-treatment was necessary.

CASE 23.—The daughter of a merchant, nine years old, had been treated by machinery for a long time, for extreme contraction of the right sterno-cleido-mastoideus and distortion of the upper part of the spine. I divided both portions of the muscle, and after having closed the wound employed Glisson's swing. After four weeks the head was perfectly straight.

CASE 24.—The son of the apothecary Ehrhard, 14 years old, suffered under the highest degree of contraction of the right sterno-cleido-mastoideus and distortion of the upper part of the vertebral column. I divided both portions of the muscle, but the obliquity was not entirely removed; and, even after the most careful treatment during several months, I did not succeed in making the head quite straight. I shall operate again, as the muscle has again become tense, especially at the posterior part.

CASE 25.—The son of Bückling, carpenter, six years old, affected with contraction of the right sterno-cleido-mastoideus, was perfectly cured in a fortnight, by dividing both portions of the muscle.

CASE 26.—Mr. Dohm, student of divinity, was so disfigured by contraction of the right sterno-cleido-mastoideus that it would, no doubt, have prevented him from pursuing his professional duties. I divided both portions of the muscle, and the operation, after a few weeks, was perfectly successful.

CASE 27.—The son of Mr. Werkenthin, three years old, was affected with a contraction of the right sterno-cleido-mastoideus. In presence of the Councillor of State,

Arndt, I divided both portions of the muscle, only a few days ago, and he will be cured in a short time.

Case 28.—A young man, 13 years old, apprenticed to a tailor, was perfectly cured in a fortnight, by division of the anterior portion of the right muscle.

Case 29.—Maria Wolgast, 11 years old, daughter of a smith, and a very intelligent child, was born with contraction of the left sterno-cleido-mastoideus. Machines had been used during several years without any success. I divided both portions of the muscle, and the recovery was so quick, that on the ninth day the child might have been considered as perfectly straight.

Case 30.—Marie Helucke, eight years old, was born with contraction of the left sterno-cleido-mastoid muscle. Her five sisters and brothers had all suffered under the same complaint; four of them died, and one brother was greatly disfigured by an extreme degree of the disease. The surgeon of the staff, Mr. Müller, divided the sternal portion of the muscle in the girl, and immediately after the operation the head became straight. The dressing and after treatment which was employed did not differ from that already described. The cure was complete on the third week.

Case 31.—I performed the operation on her brother Charles, 12 years of age, immediately afterwards, by dividing portions of the contracted muscle. This case was one of extreme difficulty. The head almost touched the shoulder, and the contraction of the muscle was uncommonly strong. At the same time the cervical vertebræ were distorted laterally. After the operation a considerable effusion of blood ensued, and the fluid became decomposed. The abscess was opened by a small incision, after which the cure was soon completed.

Case 32.—A boy, 12 years old, was afflicted with strong contraction of the right sterno-cleido-mastoideus, by which the head was drawn close to the shoulder. The vertebræ of the neck likewise deviated from their normal direction. Von Graefe had divided the muscle, but by laying it bare before the operation, according to the old and obsolete method. After the wound healed a new contraction of the muscle ensued, and required another operation. This was done by the same surgeon likewise after the old method. He applied extension, but without success. According to the account which was given by the father the duration of this long though unsuccessful treatment was three months. On being called in I found the sterno-cleido-mastoideus strongly contracted, and very hard at the lower part, a circumstance produced by the cicatrices; on bending the head to the opposite side the lower part of the muscle, where it had been divided, did not project, as it was bound down by indurated cellular tissue. It became most prominent in its middle part. Here I divided the muscle completely across by inserting the knife at its posterior margin, then carrying it under the muscle, and drawing it back again without injuring the skin; no extension was employed. The patient was able to leave the room five days after the operation. No extravasation of blood, or suppuration took place; the vertebræ of the neck remained a little oblique; this, however, gradually ceased.

Case 33.—Charles Lehmann, nine years old, born with a contraction of the left sterno-cleido-mastoideus, and considerable distortion of the vertebræ of the neck. I divided both portions of the muscle. No accident followed, and the cure was complete in eight weeks.

Case 34.—Marie Weber, aged 18 months, was afflicted with contraction of the right sterno-cleido-mastoideus and curvature of the vertebræ of the neck. I divided both portions of the muscle, and the cure was complete in four weeks.

Case 35.—Miss Epuer, of Potsdam, 13 years old, was born with contraction of the right sterno-cleido-mastoideus. She had been treated by machinery, but without success. I divided both portions of the muscle, and a perfect cure was obtained in a fortnight.

Case 36.—Albert Wreske, of Brandenbourg, was born with contraction of the left muscle. The consequence was a well-marked curvature of the vertebræ of the neck. The weakness of the young man had always presented an obstacle to all former treatment; a perfect cure was obtained in four weeks.

Case 37.—Marie Zimmer, nine years old, affected with congenital contraction of the left sterno-cleido-mastoideus. I divided both portions of the muscle, and a perfect cure was the result.

Remarks.

Of 37 cases operated upon none died, but all, with the exception of one, were perfectly cured. This one requires a second operation, which will be trifling. On one occasion only severe hæmorrhage took place, but without any bad consequence; and in another the formation of pus rendered some precautions necessary.

In all the individuals submitted to my care I have observed some obliquity of the face; the side at which the musculus sterno-cleido-mastoideus was contracted, was always drawn downwards, and the other appeared somewhat higher; the eyelids, angle of the mouth, and the wings of the nose were drawn downwards. In young children and where the disease is milder, the face often becomes straight in a few weeks after the operation. In adult persons, and in the more important forms of the disease, the bones of the head and of the face are im-

plicated, and months, or perhaps years, are required to restore the natural appearance of the face. In those cases where the vertebral column is deviated, the restoration of the head to its upright position forces the spine to become straight, in order to preserve the equilibrium of the body.

Of the whole number of cases contraction of the left muscle existed only five times. In all the others it existed on the right side. The reason of this could not be sought in the generally stronger development of the right side of the body, and in the greater use of the right arm, as the children were either born with contraction of the muscle, or the obliquity was observed in the tenderest age.

These cases show that the division of the muscle with *preservation of the skin covering it*, deserves to be preferred to the old method, in which an extensive incision of the skin is made; even in one case it was successful after Baron Von Graefe had operated twice according to the latter method.

I am much indebted to Drs. Böhm, Berendt, Reich, Holthoff, and Mr. Hildebrandt, for their indefatigable care and skill in the after-treatment of these cases, by which alone these favourable results could be obtained, and in comparison to which the act of the operation itself is very unimportant.

REMARKS
ON THE
REMOVAL OF TUMOURS
ENORMOUSLY ENLARGED BY
ELEPHANTIASIS.

By EDWARD THOMPSON, *Esq., M.R.C.S.L., &c. &c., Whitehaven.*

THE interesting case of scrotal tumour by Dr. Goodeve, in THE LANCET, of August 18, 1838, induces me to offer a remark or two on the removal of such growths, it being a question of vital importance, whether enormous enlargements, the product of morbid action, of lengthened duration, should be hastily separated from the body, or whether it would not be more desirable, and less pregnant with danger, to remove tumours of this nature, in a less rapid and violent manner. The discussion of this interesting inquiry would lead me farther into the consideration of the subject than opportunity will permit, and I shall, therefore, confine myself merely to the consideration of the propriety of excising these gigantic masses of morbid production.

The examination of the tumours which have been removed, leads to the conclusion that, although such tumours may not be highly organised, or greatly supplied with blood, they are sufficiently so to make it dangerous to cut into them. The arteries, it is true, are few, and comparatively small, but the veins are immense reservoirs, and in some cases, indeed in all, very numerous. In Mr. Key's case, "the number of large veins divided was immense, but only three small arteries, besides the two spermatic, were taken up."

Dr. Birrel says, that the incision in his case, of Jennie Mitchell, "brought into view several veins very much enlarged, being fully an *inch* in diameter, which, when divided, threw out an immense quantity of blood, completely deluging the table." In a case of tumour of a somewhat similar nature, operated on by Mr. Smith, "it was not necessary, during the operation, to tie a single artery, but the venous hæmorrhage followed every stroke of the scalpel in such profusion, that in spite of very able assistance, received from immediate digital pressure, upon the mouths of the severed vessels, he had very serious apprehension, more than once, that his patient would have sunk." In a case operated on by M. Clot it was only necessary to tie a single artery, although the tumour was fifty pounds in weight, but the veins were numerous, and extensively enlarged. These references are sufficient to show that great and dangerous hæmorrhage may take place on the excision of the above species of tumour, although it may be *only venous*. The argument that has been advanced, of the non-vascularity of these enlargements, is true as far as arterial vascularity is concerned, but as respects the veins it holds no place. The veins are perfect receptacles for blood, and if merely emptied, must in certain cases prove dangerous, without a single drop being lost from the system itself. By the sudden abstraction of so much fluid from the circulating mass, the balance of the circulation becomes affected, or may be destroyed. This effect will depend upon the peculiar idiocracy of the patient, and as this cannot be known until the operation is being performed, when it is too late to recede, the safety of excising these enlargements must, in all cases, be at best but problematical. The danger does not depend upon the quantity of blood lost, but on the effect produced. In one case death took place after the loss of from twenty to thirty ounces of blood; and in Dr. Goodeve's case about forty, and this, as he says, merely venous, was the whole loss sustained.

The opinion entertained so generally of the shock to the system, by the excision of these tumours, being the cause of death, although it may have some effect, will not, by those who have critically examined the symptoms, be considered as the direct cause of it. The low degree of vitality possessed by these tumours militates against the opinion of an immediate shock causing death. The shock does not equal amputation of a limb, but in the latter there are no wells of blood, as in the former case, to which the

system has been long accustomed, and to which the equilibrium of the circulation has become, as it were, subservient. Respecting the shock alluded to by Dr. Goodeve, of removing the testes, this has been proved of small importance, and, as he states, has been exaggerated. Dr. Daniell removed a tumour of thirty-five pounds weight along with the testes, &c., and Mr. Liston and M. Clot have done the same. The latter, in his subsequent operations, thought it advisable to preserve them, and in the last case, in doing so, had nearly lost his patient by the delay. But generally it is not worth the hazard of endeavouring to save them, as these parts are elongated and diseased.

In the preceding brief observations I have endeavoured to direct the attention of the profession to the danger of dividing the large veins, with which the affected parts are so liberally supplied, being satisfied that the simple emptying of these will, in certain cases, produce collapse, and that it is to the sudden effusion of blood, be it small or large, favoured by peculiar disposition, to which we are to attach blame, and not to the shock of separating these obnoxious enlargements from the body. In the usual mode of operating this is difficult to avoid, indeed, almost impossible. In Dr. Goodeve's case the separation was effected in the short space of fourteen minutes, and yet death followed the operation; but it must be recollected that forty ounces of blood was *supposed* to be lost, and perhaps much more, for this was mere *supposition*. It appears, then, that with the most skilful, and under circumstances the most favourable (for Dr. Goodeve states, "I must confess that I did not anticipate the event, for everything conspired to favour its success; the patient was in excellent health and good spirits; no very *alarming quantity of blood was lost*, and the operation was rapidly performed, and the *patient's sufferings did not appear to be great*"), that death may ensue, and that no one can be certain whether or not his patient will, after the excision of such enormous masses, survive the operation. That the most probable reason has been overlooked of the cause of death, I need only refer to the history of the operation to prove. The venous loss is remarked by every operator, and as such is considered as of small account, they forgetting that the balance of circulation may be destroyed as readily by venous flow as by arterial, under circumstances favouring it. Thus I have known a life lost by the flow of not more than forty ounces of blood from a varicose vein in the leg, and every man's experience will furnish him with facts of a like kind.

These considerations point out the necessity of preventing the sudden flow of blood taking place in removing enlargements of the above description. The dissection of these growths proves that in most of them the veins are so numerous and enlarged that the slightest advance of the knife cannot but divide one or more of them, and that it is a matter of impossibility, to prevent the loss of a serious quantity of blood in any operation. It therefore becomes a question whether the knife ought ever, under circumstances of such difficulty and doubt, to be employed at all in the removal of these affections. A review of the probable causes of death would incline one to arrive at the conclusion that if they could be effectually removed without excising them, considering the danger this measure necessarily entails, it would be better to do so.

The common shape of these growths favours the idea of their removal by ligature, and certainly if it be true that the danger lies in the destruction of the balance of the circulation, this would be the best mode of avoiding it. The trial is safe, if the steps of the proceeding be conducted with ingenuity and care, and that tumours of greater hazard to the patient may be in this way removed, I have elsewhere shown, and think it unnecessary to repeat. When the scrotum is the seat, a catheter must necessarily be introduced, before applying the thread, remembering at the same time that haste is not absolutely required in the proceeding. The peduncle or neck varies from eighteen to seven inches generally in circumference, perhaps more, but this is not of so much consequence as may generally be thought. Now, although to some it may be viewed as a process of tardy accomplishment to separate this species of disease by the above means, I know from experience that tumours may in this manner be safely taken off, and that the danger of the other mode ought to oblige us to embrace any measure, however slow, providing it be safe.

CASE OF

SPASMODIC DYSPHAGIA.

To the Editor of THE LANCET.

SIR:—Should you think the following case of spasmodic dysphagia sufficiently interesting to merit a space in your Journal you will oblige me by its insertion. I am, Sir, your obedient servant,

W. B. BARTON, M.D.

Horncastle, Sept. 4th, 1838.

On the 15th of April, 1834, I was requested to visit Mr. M., æt. 71, who for the last few months had suffered at intervals from a spasmodic affection of the œsophagus. The patient stated that, with the exception of periodical attacks of gout, he had enjoyed an uninterrupted course of good health until he was seized with this œsophageal complaint, since which his usual gouty symptoms had entirely vanished; the spasm, a

purely spasmodic dysphagia, did not assume any periodicity in its attacks; it generally, however, came on during dinner, either at the commencement or towards the termination. This did not appear to be owing to the substantial diet then taken, as he was accustomed to eat animal food twice or thrice a day, and, further, a draught of cold water was occasionally sufficient to induce it. The attack generally lasted a few seconds, at the close of which he was able to resume his meal free from pain and uneasiness.

Mr. M. had all the appearance of robust health. Pulse 60; skin cool; tongue clean and moist; appetite good; bowels perfectly regular; excretions healthy; no cough; respiration easy and natural; evidently no pectoral disease.

Draught of hydrocyanic acid.

21. Slightly relieved by the draught.

May 19. The hydrocyanic acid in gradually increased doses not entirely allaying the spasms, antispasmodics were tried, and afterwards the carbonate of iron, without any alleviation.

June 3. A consultation was now proposed, when it was advised that leeches be applied to the lower lip, a blister to the stomach, and blue pill with ipecacuan in small doses, to be taken night and morning. Camphor mixture during the day.

17. The remedies last proposed having now had a sufficient trial without any satisfactory result, I resolved on trying colchicum, and ordered the following:—

Wine of colchicum, 2½ drachms;
Tincture of hyoscyamus, ½ drachm;
Calcined magnesia, 1 drachm;
Peppermint water, 2 drachms;
Water, 4 ounces. One ounce three times a-day.

21. Much relieved by the colchicum. Repeat mixture.

28. Has been entirely free from spasm during the last ten days.

From this period until the latter part of October my patient kept the colchicum mixture in the house, and when threatened, as he was at intervals, with spasms, a few doses invariably dispelled them.

November 2. Complains of huskiness, with slight loss of voice; some cough; no expectoration; thinks he has caught cold, having taken carriage exercise daily. The attacks of spasm more violent, though not so frequent; strength failing.

To take *Dover's powder* and *calomel* thrice a-day.

A variety of sedatives were now tried without any beneficial effect.

27. Much worse; huskiness increased; voice nearly gone; slight cough, accompanied with mucous expectoration; difficulty of swallowing almost permanent, and increased to such an extent that liquids alone are taken. A second consultation held. Ordered—Venesection to eight ounces; four leeches to the affected part.

Camphor, 12 grains;
Sugar, 2 drachms;
Nitrate of potash, 1 drachm;
Wine of ipecac., 1 drachm;
Water, 6 ounces. One ounce twice a-day.

December 1. Evidently worse; voice completely gone; cough troublesome, with purulent expectoration.

4. The opinion of Dr. Alderson, of Hull, was now taken. To have hydrocyanic acid in decoction of sarsaparilla three times a-day, and an anodyne draught at bedtime.

5. Purulent expectoration profuse; cannot speak even in a whisper; gradually sinking.

6. Passed a quiet night; respiration gradually failing, and died without a struggle, or any apparent suffering, about 11, A.M.

Sectio cadaveris 48 hours after death, in the presence of Dr. Alderson.

General appearance of the body.—Much adipose or fatty matter in the parietes of the abdomen; much fat in the omentum; intestines healthy; liver soft, but not changed in structure by deposition of foreign matter; spleen healthy; stomach healthy.

Chest.—Lungs healthy; heart soft and flabby, but not otherwise diseased; valves healthy; aorta natural.

On tracing upwards from the cardiac orifice of the stomach to the œsophagus, a large ulcer with ragged edges was found surrounding the œsophagus internally, extending laterally and upwards and downwards three inches, precisely situated at the bifurcation of the trachea; there existed a collection of gangrenous matter (solid and liquid) as if it had been contained in cells, which extended more to the right side and backwards than forwards; the trachea was changed in colour to a deep gangrenous greenish-purple, and in many places cracked, the cracks extending into the gangrenous mass.

SARSAPARILLA.

THE SARSA OF THE RIO NEGRO, AND THE VARIOUS PREPARATIONS OF SARSAPARILLA.

To the Editor of THE LANCET.

SIR:—The very favourable results which followed your insertion of my paper in 1829, on the celebrated sarsa of Rio Negro (*smilax sepulitica*), and its preparation, the xarave del rey of the Spanish Americans, encourages me to hope that the following brief notice will be found serviceable in awakening the attention of the faculty to the merits of this valuable remedy, and to the defective modes adopted in the several preparations

of sarsaparilla. I have the honour to be, Sir, your very obedient servant,

JOHN HANCOCK, M.D.

Welbeck-street, London,
August 18, 1838.

The xarave del rey, or Rio Negro compound, has, since the publication alluded to, become known and highly appreciated by many eminent physicians in North America, as an efficacious remedy in chronical disorders. It is this species which, as Humboldt justly remarks, is the most active of all that are known, and much preferred to the zarza of the province of Caraccas or of the mountains of Merida. That it has not come into more general use in this country may be accounted for from the difficulty there exists in procuring the necessary ingredients which enter its composition, and which are indigenous and peculiar to the American Continent.

In the "United States Dispensatory," of 1836, edited by Drs. Hood and Bache, this subject has been treated at some length, and those gentlemen unite with me in opinion, that the present manipulations of sarsa are extremely imperfect, and calculated to spoil a most useful and important remedy; repeated experiments having proved, that the long boiling dissipates the volatile principles, and destroys other properties, and that water alone is a very imperfect menstrum for holding its alkaloid in solution.

According to experiments made by several eminent continental chemists, three or four alkaloids have been named as being the active principles of sarsaparilla; but more recently M. Paggiale reduces these principles to one only, stating that they are decomposed by heat, and that the pith as well as the bark contains salsaparine. The active principle, he says, is very imperfectly taken up by water; but is readily soluble in alcohol, acids, and ether, forming a solution which is very nauseous and bitter. These differences of opinion may reasonably be accounted for, when we consider the variety of roots there are passing under the common denomination of sarsaparilla.

As to the depreciation of the virtues of sarsa from excess of boiling, this important fact is known and acknowledged by continental chemists; and practical experience in the Oronoko has proved, that preparations made with vinous or spirituous menstrua prove far more efficacious than those with water; unless, indeed, fermentation be employed, which, by the spirit and acid formed, evolves the active elements of the root. It is evident that, whether the principle be understood or not among the Spaniards, those people have a much better method of preparing it than is known and followed in this country.

There are numerous species of this plant, and divers other roots similar in appearance, that pass in the market as genuine sarsaparilla; although, in fact, many of them have none of the properties peculiar to the genuine plant. Amongst the roots sold for sarsaparilla, may be mentioned one of the class pentandria, a species of periploca, and which, although extensively used, claims no affinity to the genus smilax. This plant is brought from the East Indies; it contains but little farinaceous matter, and therefore affords a very clear decoction or infusion. On this account it appears to be favourably received; its poverty being thus its chief recommendation. Even in some of the true species of smilax the active powers are so exceedingly slight as to be scarcely deserving of notice. Thus, even the Jamaica sarsa, which in this country commonly passes for the best, is held in slight estimation by the Americans, practical experience having convinced them that its powers are very limited.

Dr. Duncan, in his "Edinburgh Dispensatory," observes, "the roots have a bitterish, not ungrateful, taste, and no smell; it is, however, a very inert mucilaginous substance;" and Mr. Brande, in his "Manual of Pharmacy," has repeated nearly the same observation. This proves most clearly, with due deference be it spoken, that neither of these gentlemen ever possessed the slightest knowledge of the genuine sarsa, and, also, that they were not aware of any means of distinguishing the good from the bad; in fact, they judged only from appearances, and not from the sensible qualities, which afford the only correct criterion. It is to be regretted, as highly detrimental to the advance of knowledge, that authors should thus proceed copying each other, adopting every opinion and every dogma, true or false, and giving the sanction of their names to numberless errors without reflection and without investigation. The gentlemen above named are enrolled among the *high authorities*, and, as a matter of course, their opinions regulate the inferior writers; it was, therefore, a duty incumbent upon them to consider well, and duly investigate, such matters, ere they gave their opinions to the world.

Before my paper on this subject appeared on record no one seemed to be aware that the genuine sarsaparilla, when chewed, impressed a nauseous acrimony on the mouth, and especially on the throat and fauces.

My remarks upon this subject, addressed to the Medico-Botanical Society, have been reprinted entire in the "Journal of the Philadelphia College of Pharmacy," vol. 1, and translated into the Italian, French, German, and most other European languages; and my deductions as to the proper solvents of the active principles of sarsaparilla have been confirmed by some of the ablest experimental chemists of France and Ger-

many.* From the notice taken of the subject (in France and North America particularly) we find it has obtained a much higher consideration abroad than in this country; this I think is to be attributed to its unbounded extent of commercial speculation, and the consequent substitution of other plants which are brought to this market from every quarter of the globe,† as likewise to the defective methods of distinguishing the comparatively small quantity of the genuine from the abundance of non-medicinal roots sold under the name of sarsaparilla; to this may be added the insufficiency of the menstruum employed, and the faulty, not to say destructive, method pursued in its preparation, especially from its long boiling, as directed by the colleges; the Rio Negro sarsa is mostly consumed in the Oronoko, Varinas, and other neighbouring parts, being constantly employed by them as a substitute for mercury in syphilitic and all chronical disorders; as an article of commerce it never finds its way into this country, and even should it do so it would be lost among the many roots passing under the common denomination of sarsa. I have often regretted that measures had not been taken by some one well known to the faculty to supply the public with the genuine xarave del rey, or compound of Rio Negro sarsaparilla, and this more especially since I find certain spurious preparations assuming that name without the least pretensions to it; in fact, being entirely deficient of its efficacy or healing properties. With some of these preparations my own name has been most unaccountably used, and to such an extent has this been done that having a stock of the genuine material, and the several ingredients which enter this compound, together with facilities for a regular supply of the same, it is my intention on some future day, as a measure of self-defence, and in order to prove its efficacy, to have prepared, under my own immediate direction, the true and genuine compound Rio Negro sarsaparilla.

CASE OF SIMPLE ILEUS.

To the Editor of THE LANCET.

SIR:—Drs. Whiting and Tweedie, in the article on Colic, in the "Cyclopædia of Practical Medicine," make the following observation:—"It has been asserted by some writers that an inverted action of the whole or of part of the alimentary canal, may be produced independently of either debility, spasm, or obstruction: they adduce in proof of this opinion the speedy discharge by the mouth of fluids which have been thrown into the bowels by clyster. These last are called cases of simple ileus, and perhaps the evidence adduced to prove the existence of such a state is still open to controversy."

The last remark induces me to notice the following case:—Mrs. Sarah West, 78 years of age, of a robust habit of body, had throughout life suffered very little from illness. In March last she had a catarrhal affection which yielded to proper treatment. She was troubled occasionally afterwards with constipation, for which she took pills of extract of colocynth, or castor oil, which had the effect of opening her bowels. On the 20th of April it was found necessary, from the same cause, to prescribe an infusion of senna, which operated freely. Her bowels having been again constipated during several days, she began to suffer from nausea and restlessness, but had no pain on pressure over the abdomen; pulse soft, and perfectly regular; tongue clean.

On the morning of the 25th she vomited stercoraceous matter, mixed with a considerable quantity of slimy, frothy fluid. She appeared considerably exhausted from the effects of the vomiting; but after reposing a short time, some light food was given to her at her own request, which was almost immediately vomited; on taking, however, some more shortly after, it remained on her stomach. In this manner she vomited fæcal matter, and took food every morning, during six weeks; at the expiration of this period the vomiting took place at intervals of three or four days, or a week, up to the day of her death, the 11th of July.

From the 20th of April, a period of eighty-one days, she had no evacuation whatever per anum, with the exception of a scanty discharge, about half an hour before death. She sank, completely exhausted, without having suffered acute pain at any time during her illness. Once or twice she complained of slight pain, or rather tenderness, on pressure over the cœcum. There was at no time much borborygma, or distension of the abdomen. Whenever the vomiting was suspended for a few days, she complained of a feeling of fullness at the epigastrium, and, to use her own expression, a sensation of "deadness" at the lower part of the abdomen. During several weeks she had daily, sometimes in the morning, and at other times towards night, a slight paroxysm of fever, of about an hour's duration, with heat of surface and thirst, but without the pulse being much affected.

With regard to the treatment, my friend, Mr. Fieldsend (at Gautby, Lincolnshire), whose patient she was, gave her at first

* In proof of this see "Journal de Pharmacie," vols. 15, 16, and some subsequent numbers.

† Professor Marsius, in his learned and elaborate work, the "Pharmacognosia," has enumerated no less than thirteen different kinds belonging to other genera which are sold as the genuine sarsaparilla, but which in fact have no alliance with it except in the basis of the roots.

small doses of castor oil, frequently repeated, then drastic purgatives, croton oil, &c.; and, to quiet the restlessness and induce sleep, morphia was administered to a considerable extent.

My object, however, is not to take up space by entering into any detail relative to the treatment, but to point out that an inverted action existed throughout the whole extent of the alimentary canal, which was shown by the vomiting of the enemata (which were administered several times during the patient's illness), within twenty minutes or half an hour after they were injected, without any portion of them being returned per anum. The injecting apparatus made use of was the common bladder and pipe, so that no great expulsive force could have been used,* and even when the experiment was tried of injecting the enemata slowly, and with no more force than was absolutely necessary, the same result followed. I think it may be fairly inferred from this, that there was neither debility of the muscular coat of the intestinal canal, nor spasm, nor obstruction. This case may, therefore, be considered as one of "simple ileus," alluded to by the learned physicians above-mentioned, the existence of which they consider open to controversy. It is to be regretted that a post-mortem examination was obstinately refused. I am, Sir, your very obedient servant,

KEITH IMRAY, M.D.

London, Sept. 24, 1838.

A CASE OF

POISONING BY ARSENIC,

CURED BY THE TRITOXIDE OF IRON.

By JOHN MURRAY, *M.D.*

THE following case may be added to those which we have already published, in proof of the efficacy of the tritoxide of iron as an antidote to arsenic:—

W. Bayley, hospital apprentice, ætat. 22 years, admitted on the 19th May, 1837, at 11, A.M., complaining of violent vomiting, with excessively acute pain, on pressure, over the epigastrium. He swallowed, with the intention of committing suicide, about 15 grains of white arsenic (arsenious acid) at 9, A.M., and vomiting commenced at 10, A.M., with purging. He is very much depressed; pulse 100, weak. He got three grains of tartrate of antimony, which caused free vomiting, and he was bled to 16 ounces, and got repeated mucilaginous draughts till some of the tritoxide of iron was prepared.

1, P.M. The pain in the epigastrium is excessively acute, extending more over the abdomen; several attempts at vomiting, and some tenesmus.

℞. *Tritoxide of iron*, ℥ss. every half hour;
Cont. *mucilag. mixture.*

4, P.M. Pain more diffused; has retched several times; no stool. Twenty leeches to epigastrium.

Cont. *tritoxid. of iron.*

7, P.M. No vomiting; pain in abdomen much relieved; no stool; pulse 64; tongue clean; skin cold.

Castor oil, one ounce;
Cont. *tritoxid. of iron* every second hour.

11, P.M. One copious stool; pain in abdomen more acute on pressure. Had slight cramps in his legs; is very low. Pulse 48; skin cold.

Cont. *tritoxid. of iron* every hour; a blister to the abdomen; purgative enema.

20. Had two doses of the tritoxide; slept a little; one dark brown stool; no vomiting; says the pain in the abdomen is relieved; is thirsty; pulse 80; tongue furred; skin warm.

Castor oil, one ounce; effervescing draught.

Vesp. Four copious black liquid stools, with slight tenesmus; slight pain in abdomen; pulse 80; tongue furred; skin cool; complains of debility.

21. Slept pretty well; no stool; still tenderness on pressure over the descending colon and in the epigastrium; pulse 80, soft; tongue clean; skin cool.

Repeat medicines.

22. Four black stools; slept well; no complaint.

Castor oil, one ounce.

23. Bowels open; no complaint.

Com. infus. of senna, two ounces twice a day.

24. No complaint; returned to his duty.

Remarks.

The fluid evacuated from the stomach by the emetic was transparent, slightly yellow; it contained little animal matter. It gave a green precipitate, with the ammoniaco-sulphate of copper; a stream of sulphuretted hydrogen produced an orange yellow tinge. The fluid was then boiled, and a brown precipitate subsided; this was collected on a filter, dried, and put with some black flux into a glass tube, and heated by a spirit lamp, assisted by the blowpipe. A shining gray crust was procured. The piece of tube to which the crust adhered was removed, and put into another tube, and heated. The

* I mention this particularly, because I have observed in treating cases of "dry belly-ach" in the West Indies, that when a powerful syringe was used, and much fluid thrown up, it occasionally reached the stomach, and was immediately vomited. The same circumstance has also been observed by my friend Dr. D. Embleton, in similar cases amongst the colliers of Newcastle, who are subject to this disease.—K. I.

crust disappeared, but I could not trace any crystals of arsenious acid; however, on the addition of water, a green precipitate was procured by the ammoniaco-sulphate of copper. The presence of arsenic was evident, and had the process been more carefully conducted, with better apparatus, a larger product might have been obtained. Much of the yellow precipitate was probably sulphuret of antimony, from the tartrate of antimony administered as an emetic, and a large proportion of the arsenic had been evacuated by the previous vomiting, still from the progress of the symptoms I anticipated the death of the patient; and, though auxiliary means were employed, I think the patient owes his life to the tritoxide of iron. He has enjoyed good health up to this date. —*Calcutta Quarterly Journal*, Dec. 1837.

CASE OF

ENCYSTED TUMOUR CURED BY IODINE INJECTION.

By H. H. Goodeve, *M.D.*

Mrs. A——, aged 30, consulted me in January last for the removal of a tumour from the left side of her neck. The swelling was about the size of a small fist, situated just above the clavicle, upon the course of the subclavian artery. It was moveable and elastic, evidently containing fluid, but causing no pain or inconvenience, save an occasional numbness of the arm, produced by the pressure of the tumour on the *brachial* nerves. The diseased structure was the growth of a few months, and was rapidly increasing. Mrs. A——'s health was good, and she was very anxious to have the tumour excised. It was, however, too evidently a hydrocele of the neck to permit the use of the knife until other measures had failed, and I resolved to attempt its cure by promoting adhesive inflammation in the walls of the sac. The very great success which had attended the iodine injections recommended by Mr. Martin, in scrotal hydrocele, induced me to give that method a trial. Accordingly, on the 16th of January, I punctured the tumour with a trocar, and having discharged its contents, which consisted of a thick glairy serum,* I injected into it two ounces of a solution of iodine, made by adding three grains of solid iodine and a drachm of hydriodate of potass to six ounces of water. The tumour almost immediately swelled up to more than its original size. This swelling increased in the course of the next day, and the part became very painful and red. It continued in this state for five or six days. At the end of that time the tumour began to subside, and the pain and redness diminished rapidly. In the course of another week that side of the neck was nearly as flat as the other, a small lump only remaining in the site of the original tumour; this finally disappeared, and no vestige of it could be observed at the end of six weeks. During the whole time little or no constitutional irritation manifested itself.

The complete success which attended this case is an additional proof of the value of iodine injections in tumours of this nature. Another disease is thus added to the list of those over which this powerful remedy has so much influence: of all remedies recommended for the cure of encysted tumours, this appears to be the most desirable. It is simple, and easily applied, producing comparatively but little inconvenience or suffering. It is very superior to the seton, inasmuch as it is less formidable and far less painful; it appears to be more certain than any other of the stimulating injections, and of course it cannot be compared to the plan of slitting up the tumour, and procuring an obliteration of the sac by suppuration. Indeed there is nothing to contra-indicate its use in diseases of a similar character to that which has been related.—*Calcutta Quarterly Journal*, July, 1837.

* The fluid coagulated rapidly after it was withdrawn, and presented all the appearances of blood deprived of its colouring matter.

PREVENTIVE AND CURATIVE

TREATMENT OF RABIES.

We extract the following interesting remarks of Mr. Youatt on the means of preventing and treating rabies, from the last number of the "Veterinarian":—

Rabies is an affection of the nervous system. Is it possible, by the exhibition of some diffusible stimulant, whose power of excitement may be considerable and permanent, and its sedative effect slight and transient, and whose principal action is on the nervous systems—is it possible to maintain a constant excitement of them until the virus is worn out? or may a gradual change or modification of the nervous system be produced, so that it shall not be susceptible of the influence of the virus?

These were the questions that I was accustomed to ask myself, and which induced me to put to the test all supposed preventives whose composition I could ascertain; and I perfectly satisfied myself that many of them had power, and to a very considerable extent.

Mr. Blaine had satisfactorily ascertained that the common box was the basis of the preventive drinks that had acquired so much reputation in Hertfordshire and Kent. Some rue entered into the composition of the drench, but the box was the principal ingredient. Its bitter and nauseous taste

would induce the suspicion that it possessed some powerful medicinal virtue. It was evidently a narcotic. The human patient always experienced considerable giddiness for half an hour after taking it, and the dose for the dog was regulated by the degree of staggering and distress which it produced. Several of them were destroyed by an over-dose. The rue also is an acknowledged antispasmodic, and exerts its chief power on the nervous system. This compound was undoubtedly a preventive. Very few dogs bitten by a rabid dog, and no preventive measures being taken, escape; but the decided majority of those who were drenched with this mixture never exhibited the slightest symptoms of rabies. Beyond this, however, we could not go. We saved the majority; but we had no effectual security.

The alisma plantago is a decided sedative. I experimented on it to a considerable extent, and was satisfied that it had effect, perhaps more than the box; but it was not the preservative which it was asserted to be.

The belladonna followed, and it also had power, but no absolute dependence could be placed upon it. So it was with Dr. Spalding's scutellaria lateriflora. Its effects on the cerebral system were singular. I repeatedly took an infusion of it, and the consequences almost invariably was a feeling resembling the pleasing exhilaration of incipient intoxication, rapidly changing to a giddiness not quite so pleasing, and the whole passing off in eight or ten minutes, and leaving no exhaustion or depression. It was certainly more efficacious than either of the others; but instances of palpable failure too often occurred. I combined these medicaments in various ways; but I could never get anything approaching to a specific.

The last and the most important division of inquiry is the treatment of rabies when it is unequivocally developed. In the great majority of cases, prudence and humanity will dictate the immediate destruction of the animal. There are but two motives that will justify any delay. If mischief has been done—if a human being or any valuable animals have been bitten, and it has become necessary to have recourse to painful preventive measures, it may, for the sake of the practitioner and of the patient, be advisable to commit the dog to close and safe confinement, in order that the appearances after death, corresponding with the symptoms during life, may justify these precautionary means. The reputation of the practitioner and the satisfaction of the patient may demand this.

The human or the veterinary surgeon may also be justified in delaying the destruction of the animal in order to experiment on the effect of certain medicines or operations.

The true nature of rabies has been sufficiently established in the course of our inquiries. It is a state of excessive nervous irritation, commencing with the motor nerves of organic life, speedily involving the cerebral system, and rapidly exhausting the powers of nature. Then the object of the practitioner, whether human or veterinary, would be to allay, if possible, this dreadful state of excitation: to that point, and to that alone, his attention should be primarily directed.

The first weapon would be depletion, and carried to its fullest extent. The vessel selected would be the jugular vein in the quadruped: the incision would be large, and the blood would be suffered to flow not only until a manifest change was produced in the action of the heart and arteries, and syncope supervened, but the circulation beginning to return, the bleeding would recommence, and a second and longer fainting ensue. It is painful, however, to record the little permanent effect which even decisive treatment like this produces.

A dog weighing about ten pounds, and evidently labouring under rabies, was subjected to copious venesection. About six ounces of blood were first abstracted; when he fainted, and scarcely rallied again for many an hour. On the following day he was again bled to syncope: four ounces alone could be abstracted. On the third day there was manifest but deceptive improvement—he ate and drank, and was gentle and tractable; but towards evening the eyes closed and the head drooped, and the husky guttural sound in the throat returned, and he should have been bled again; it was delayed, however, until the following morning, when five ounces more of blood were abstracted. He did not rally after this depletion, but died in the evening.

This was the first experiment on the power of bleeding—others were afterwards made, with more system and with more decision. The result was uniform—the symptoms were invariably mitigated, but the dog died.

The same result has attended the adoption of venesection in the human being. It is of very ancient date, and it has been often resorted to in modern times. Bolingall mentions six cases in which the patients were bled *ad deliquium animi*, without any better result than temporary alleviation of the symptoms. Dr. Rutherforth abstracted sixty-six ounces of blood from one patient, but he died.

It had been imagined that the injection of warm water into the veins might have a more decided effect. This was put to the test of experiment. A white terrier, undeniably rabid, was the subject of the experiment, and which was conducted in my hospital by Mr. Mayo. About seven ounces of blood were taken from the jugular vein,

and nearly the same quantity of warm water injected. The dog struggled violently, so that the exact quantity abstracted and injected could not be ascertained; but it was at least seven ounces. During the process of injection the animal heaved convulsively, and was very sick. The difficulty of breathing increased—it was painful to behold. In order to relieve it, and as another interesting experiment, the anterior portion of the third ring of the trachea was removed, but without any marked advantage. I would rather say, that the labour of respiration was aggravated. On being liberated, he appeared to be very much weakened—he sat on his haunches leaning against the wall, and his fore-paws continually slipping from under him. I watched him during two hours. He was gradually sinking, and he was found in the morning nearly slipped down, his head resting on the ground, and quite dead: he must have died without a struggle.

Magendie conducted a similar experiment. His patient was a large mastiff. He laid bare the jugular vein, and making an incision into it, abstracted about a pint of blood, while at the same time, through another incision situated lower down in the vein, he introduced warm water. On the whole, beside the pure blood that was taken away, there escaped about ten or twelve ounces of mingled blood and water. The dog, that before the experiment had been exceedingly violent, was now quite calm, and on being liberated curled himself up as it were to sleep; but he did not close his eyes. Five hours after the injection he began to suffer great difficulty of respiration, which continued to increase for half an hour, and then he died. During the whole of the previous time he was altogether calm. He was destroyed by infarction of the lungs, the whole tissue of which was filled with aqueous blood.

In one case I had recourse to the transfusion of blood. The patient was a large mastiff bitch, with dumb madness, and tolerably manageable. Eight ounces of blood were withdrawn, and replaced by nearly a similar quantity of that fluid from another mastiff that I happened to have at that time in my hospital. A slight shivering fit immediately followed the transfusion, and this was succeeded by increased brightness of the eyes, and, as I thought, a slight retraction of the tongue. The breathing was quickened—it was to a certain degree laborious; and the pulse was accelerated eight or ten beats in the minute. In less than six hours this had all passed over, and she was evidently weaker than before the experiment.

Ten hours after this experiment six ounces more of blood were withdrawn, and replaced by nearly an equal quantity from the dog that furnished the fluid for the first transfusion. The countenance again brightened, and the respiration and the pulse were quickened; but this was evanescent, and on the following morning she was dead. I had anticipated this result, for it was too essentially a nervous disease to yield to the change of a small portion of the vital current.

The same experiment, and with the same ill success, had been made on the human being. Dr. Dieffenbach, of Berlin, had a patient evidently hydrophobous. The usual means had been tried, but these having no effect, and his state becoming worse, transfusion was resolved on. After a bleeding of twenty-four ounces twelve ounces of blood were at two different periods injected.

At each injection the pulse rose and became regular, and, after some time, the dread of fluids seemed to diminish. In the evening the patient had some shivering, and was feverish. On the next day he was bled to thirty-two ounces, after which twelve ounces were slowly transfused, but without any effect. On the following day the patient had considerably changed—his face was pale, his eyes glassy, and dread of water so violent, that he was taken with shivering at the mere sight of it. In the afternoon, after a bleeding of six ounces, five ounces of blood were again injected. Immediately after the operation he drank some water, but died in the course of an hour in violent convulsions.

The object of the practitioner is to allay, if possible, that state of excessive nervous irritation which constitutes the character or the essence of this dreadful disease. One grain of the aqueous extract of opium injected into the veins of a healthy dog, will produce a sleep of some hours' duration. Ten grains have been injected into the veins of the rabid dog without the slightest narcotic effect. It is said that Dr. Babington administered 180 grains of opium to a patient without any benefit, and even without procuring sleep. Even prussic acid has been injected into the veins of the rabid dog without causing any perceptible relaxation of the symptoms. I regret that, among my numerous patients, I never had recourse to the injection of powerful sedative medicines into the veins; but I believe that almost every prophylactic that could be administered by the mouth was, at some time or other, put fairly to the test.

The box seemed not to have any power either in decoction or in extract.

The alisma plantago had great effect. A coach dog belonging to the Sardinian ambassador was rabid, and dreadfully ferocious. With some difficulty, however, I contrived to give him two drachms of the powdered root, suspended in mucilage. He was evidently quieter. Six hours afterwards the dose was repeated. The desire to do mischief altogether ceased, and a torpor amount-

ing to almost paralysis succeeded, and he died in twenty hours after the second dose. About the same time I administered the same drug to another dog, rabid and ferocious. His ferocity was subdued, and the disease was protracted; but he died. At other times the alisma did not produce the slightest effect. This was the case with almost all the sedatives to which I had recourse.

Mr. Cæsar Hawkins tried the effect of the South American guaco on a dog in my hospital. The lower jaw was dependent, the tongue black, the breathing hoarse and grating, and the true rabid howl was heard almost every minute. About half an ounce of the expressed juice of the guaco was given in the afternoon, and a second dose in the evening, with some slight relief of the symptoms; but, after the third dose, on the following morning, the change was most extraordinary. The dog recovered to a very considerable degree the use of the jaw, and could not only masticate the food when put into his mouth, but could with tolerable ease pick it from the floor. The howl ceased and the restlessness disappeared. We were surprised and pleased, and almost began to think that the grand specific was at length discovered. The medicine was continued during the day; but on the next morning the dog was found breathing slowly, with every limb paralysed, and presently afterwards he died.

The guaco was afterwards given at St. Thomas's Hospital, to a young man evidently hydrophobous. He experienced some slight and temporary relief after every dose; but he died.

About the same time Mr. Hawkins tried the veratrum sevadilla, regarded in South America as a specific in the cure of rabies. We administered four times the quantity that was said to cure the disease, but not the slightest effect was produced.

Mr. Morgan having given me some of the Ticunas poison, I inoculated a rabid dog with it, in order to see what effect one poison might have in weakening or destroying another. Although not ferocious, the animal had been in a considerable state of excitation. An incision through the integument was made on the inside of the arm, and a pointed bit of wood that had been dipped in the poison was rubbed on the exposed fasciæ. No effect being produced, the same bit of wood was introduced into an incision more deeply made. In less than two minutes the dog was more tranquil, and at the expiration of five minutes he dropped motionless, the only indication of life being a regular and not laborious breathing. In this state he continued eight hours, when I left him for the night. On the following morning I found him dead.

Sir A. Carlisle gave me opportunity of testing another South American cure for hydrophobia, prepared from a plant of the cactus family. It produced a considerable degree of temporary excitement, I might almost say insanity; but this passed over in the course of a few hours, and the disease pursued its fatal course. It was also, about the same time, given to the human being without effect.

To sum up the results of my experience in the treatment of rabies, I may say that I have seen some palpable cases of spontaneous recovery. I have seemingly gone a great way towards effecting a cure, but I never fully accomplished my purpose. I hope that I may have contributed to prevent the appearance of the disease in a great many patients; but I have never cured one.

LITHOTOMY
IN THE FEMALE
DURING UTERO-GESTATION.

To the Editor of THE LANCET.

SIR:—Hoping that the following case will be interesting to some of your readers, you will oblige me by inserting it in your widely circulated Journal. I am, Sir, your obedient servant,

HENRY THOMAS.

Sheffield, Sept. 22, 1838.

Jane Whough, ætat. 27, unmarried, tall, thin, and delicate-looking, was admitted into our infirmary, under my care, on the 3rd of April, 1838. She complains of severe pain, with swelling, in the vagina, a constant, distressing desire and straining to pass water, and states that for several weeks past she has suffered from tenderness in the hypogastric region, where she has been freely leeched with some relief. For three years she has been obliged to rise several times in the night to micturate, but did not feel any other inconvenience until about three months back.

On examination a large rough calculus was found in the fundus of the bladder, about an inch and a half in its long diameter, which could not be moved from its situation even with the assistance of the finger in the vagina. My first impression was to break down the stone, but finding that she was about four months and a half advanced in pregnancy (despite her most resolute denial of the fact), and that we could not inject the bladder, in consultation with my colleague lithotomy was agreed upon, relying on the known preservative power of Nature in the pregnant state.

April 26. I operated as follows:—Having secured my patient in the usual position for lithotomy, I passed a small sound into the bladder, presenting its concavity to the anus, and gave it to an assistant, to depress somewhat firmly, the labia being held tensely back to either side, with a spear-pointed knife I commenced a semilunar in-

cision half an inch on the right side of the urethra, carried it over, and terminated it at the same distance, on the left of the meatus urinarius externus, which incision I gradually dissected onwards, directed by my forefinger, until I arrived at the bladder, and made a pretty free opening into it, above the meatus urinarius internus. I now attempted to extract the calculus with the forceps, but ineffectually; after, however, slightly dilating the wound in the bladder, with the aid of the finger in vagina, the stone was separated from some adhesion its rugous surface had formed with the mucous membrane at the fundus of the bladder, and easily extracted. No hæmorrhage of importance occurred; an elastic gum catheter was introduced through the urethra, and secured in the bladder. The process occupied thirteen minutes.

The stone was a well-marked specimen of oxalate of lime, or mulberry calculus, measuring 1½ inch by 1 inch, and weighing 3vij.

She recovered favourably. The whole of the urine passed through the catheter until the fourth day after the operation, when a small quantity was forced through the wound, in the act of vomiting, excited by an aperient she had taken.

On the fifth day more urine drained through the wound, producing considerable soreness of the labia, &c. The catheter was now removed, and the whole of the urine, with some mucous deposit, drained through the wound until the twenty-first day, when a small quantity resumed its natural course.

On the twenty-third day she suffered from a mild attack of bronchitis, which soon yielded to treatment, but did not interfere with the curative process in the bladder, so that on the thirty-second day after operation the wound had entirely healed, and it was not easy to detect its precise situation, the whole of the urine passing at will through the urethra.

June 4. Complained of occasional abdominal pains, which an anodyne and perfect rest for two days relieved. The motions of the fœtus have been distinctly felt every day since the operation, and continued to be experienced up to the 17th of June, when she left the infirmary, having fully recruited her strength.

August 4. Since last report she has been in the workhouse, and was this morning easily delivered by a midwife, of a still-born child, partially decomposed.

Mr. Martin, one of the parish surgeons, distinctly heard the fœtal circulation after her admission into the workhouse; and she herself stated that she regularly felt the motions of the child up to three weeks before birth.

I do not claim the merit of originality in this operation, the idea having been suggested by M. Lisfranc, in one of his cliniques which I heard at La Pitié, in 1831; I am not, however, aware that it has previously been put in practice.

I will not further encroach on your valuable columns than to remark on the preference this operation appears to claim, from the perfection of the patient's recovery, there being not the slightest incontinence of urine, which miserable sequence of lithotomy in the female has but too often embittered the remaining life of an unfortunate said to be cured of stone. The case is also instructive in the evidence it contains of the impunity with which, as regards utero-gestation, we may undertake a dangerous and painful operation for the relief of an important source of irritation.

EXTERNAL USE OF OPIUM.

To the Editor of THE LANCET.

SIR:—Your Journal of the 4th August last contains the following:—

"Dr. Bow, the author of a pamphlet 'On the Treatment of Croup and Bronchitis, by the External Use of Opium,' assures us that he has employed this mode of treatment with the greatest benefit in cases of the above-mentioned diseases, on the principle 'of causing a diversion of nervous influence towards the heart and arteries, and thereby increasing their contractile power.' The following cases, however, prove that the external use of opium is by no means unattended with danger in cases of infantile disease."

As to the external use of opium, and the principle on which the practice is based, the writer of the above is correct, but the cases cited from "Siebold's Journal" have no reference whatever to the treatment recommended by me. I do not resort to what is understood by the *endermic* application; on the contrary, I give strict injunctions that the application shall not be used where the cuticle is not entire, and that lest absorption should take place.

The following extract from my pamphlet will show that I do not apply opium externally with the prospect of its being absorbed:—

"That the liniment I employ does not act on the vascular system through the absorbents, that is, by any portion of the components of it being absorbed, I think will appear evident from the fact, that in some cases the good effects follow the application almost immediately. From the fact likewise that, although I have applied it in very large quantities at once, to very young children, I have never seen any unpleasant effect produced; yet it is recorded that fatal results have followed the application of a single grain of opium to blistered surfaces in young children. Indeed, I do not believe that absorption is a function natural to the

skin in the human body; it rarely, if ever, takes place under ordinary circumstances, the cuticle being entire; under peculiar circumstances we have proof that it does take place."—P. 49.

I am more surprised that the *endermic* application of the energetic preparations of narcotics can be resorted to even in one case with safety, than that the general application should be but attended with danger.

W. F. Bow.

Alnwick, Sept. 8, 1838.

THE LANCET.

London, Saturday, September 29, 1838.

Having completed last week our annual task of laying before the student an account of the various Metropolitan Hospitals and Schools of Medicine, and having pointed out to him the path which he should follow in his search after professional knowledge, we now propose to cast a retrospective glance on the year which has gone by, and direct attention to the most prominent facts connected with the different branches of medicine which have been made public during the year 1838, through the medium of The Lancet. We shall thus present to our readers a brief retrospective review of the progress of medical science during the last twelve months. The most striking fact which results from a cursory view of the medical history of the last few years is the absence of any dominant theory, enchaining and carrying away with it the minds of a majority of the profession. The day of despotism in medical, as in political affairs, seems to have gone by, and we are settling into an healthy state of republicanism, in which independence of thought and action, a tendency to realities, and observation of facts, are rapidly taking the place of theory and generalisation.

The domain of surgery has been enlarged by several important and valuable contributions. We shall briefly notice them in the order according to which they are recorded in the pages of this Journal. Mr. Hayden has performed, with success, the operation of taking up the subclavian artery, internally to the scalenus muscle, for aneurysm of the innominata, and assures us that he found considerable advantage in employing a new needle invented by Mr. L'Estrange. He has also furnished us with the description of a perineal hernia in the female, which, if not new, is at least a very rare species of that affection.

Mr. Liston, to whom the profession is already indebted for so many improvements in the manual and therapeutical branches of surgery, has lately tied both the subclavian and carotid arteries for aneurysm of the right subclavian near its origin. This operation, which was based on sound physiological views, was unfortunately followed by secondary hæmorrhage, which proved fatal. On the other hand, we have recorded a successful case, by Mr. Fearn, of treatment of aneurysm of the innominata by ligature at the distal side of the tumour. Mr. Fearn applied a ligature to the common carotid about two years ago; the symptoms were partially relieved; and very recently he tied the subclavian artery, as it passes over the first rib. The recent account which we have received of this interesting case, renders it highly probable that the operations will be attended with complete success. Mr. Liston has also shown by his operations for the relief of aggravated stricture of the urethra, the immense resources which the art of surgery presents in the hands of a bold and skilful operator; in one of the cases which Mr. Liston has recorded, the patient had not made water through the natural passage for a period of twelve years, and the state of the urethra was such that it was necessary to cut an artificial canal, which subsequently performed its functions in a satisfactory manner. We may also mention the improvements in fracture apparatus, suggested by Mr. Liston, which are daily employed with advantage at University College Hospital.

Mr. Hale Thomson has described a peculiar injury of the shoulder-joint, in which

the head of the bone was divided perpendicularly into two parts, the accompanying symptoms being, as might naturally be expected, of a perplexing nature. The same gentleman has also furnished a very curious account of preternatural enlargement of the mammæ in the male subject, accompanied by atrophy of the testicles.

To Mr. WEST we are indebted for a description of the successful extirpation of an ovarian tumour,—an operation which has been generally fatal, and in some instances undertaken on the grounds of erroneous diagnosis. Thus, we have extracted from a foreign journal a case in which gastrotomy was performed for the purpose of excising a tumour of this description; but on opening the patient's abdomen the tumour was found to be a *windy* one.

Dr. WARREN has set an example of bold surgical practice in the extirpation of two diseased ribs, and the event of both operations has justified the undertaking.

In plastic surgery we do not find much recorded that is novel or remarkable. M. BLANDIN has successfully treated a case of artificial anus by dissecting off a portion of neighbouring skin, turning it back, and uniting it over the aperture.

Mr. TYRRELL proposes, for the purpose of arresting the destruction of the transparent cornea which occurs in purulent ophthalmia, to divide, in a *radiated* manner, from the centre of the cornea towards the sclerotic, the fold of conjunctival membrane which forms the chemosis. Mr. TYRRELL has found this method to be more efficacious than any other hitherto proposed.

Finally, we have to enumerate the important contributions to the advancement of surgery which have been made by Professor DIEFFENBACH, of Berlin; the most remarkable amongst them are his operations for the cure of lacerated perineum in the female; the history of eighteen cases in which resection of the facial bones was performed with success; and his recent memoir, containing an account of thirty-seven cases of wry neck, cured by section of the sterno-cleido-mastoideus muscle.

The novelties and improvements in medicine are less numerous than those by which the art of surgery has been enriched. We cannot, however, at the outset, avoid expressing our pleasure at the fact that the practice of medicine is daily becoming more simple, and that physicians of the present day evince an inclination to abandon those multitudinous prescriptions which, as CHAUSSIER was wont to say, are nothing better than "formulæ for medical cookery." The most important contribution which has been made for many years to the domain of medicine, is unquestionably that of Dr. CONQUEST, relative to the treatment of chronic hydrocephalus by tapping. It is unnecessary to remind our readers that this disease has ever been regarded as a mortal one; yet by the method of practice introduced by Dr. CONQUEST, the lives of ten patients out of nineteen have been saved. In conjunction with this subject we may mention three cases of chronic hydrocephalus, also cured, by Dr. ENGLEMANN, by means of pressure, a mode of treatment which Mr. BARNARD assures us originated with himself.

A novel method of applying the vapour of sulphur and iodine in the treatment of cutaneous affections and obstinate ulcers, has been introduced by Mr. A. WALKER, who has recorded a few cases in which the combined power of those remedies produced the most striking results. Mr. TAIT has administered colchicum to patients labouring under scarlatina, with very great advantage. Should the experience of that gentleman be confirmed by further trials of the remedy, an important progress will have been made in the treatment of infantile disease. Mr. KING has related some cases in which the employment of acupuncture in ascites has been attended with success. A remarkable case of convulsions, in which compression of the carotid artery suspended the convulsive attacks, and afterwards removed the disease, has been recorded by

M. Trousseau. Finally, Dr. Locock has introduced, with advantage, the use of arsenic in cases of atonic menorrhagia, and in some other disorders of the uterine system.

The labours of anatomists during the past year have not been productive of many remarkable results; in fact, anatomy appears to be at a discount. The only contributions in this department of medical science which we have to mention are those made by Miller, the mechanic, relative to several points of embryology, and the valuable observations on the structure of the negro's skin, by the late Mr. Wallace, of Dublin. Mr. Judd has also furnished several anatomical facts, worthy of notice, upon the last-mentioned subject. To Dr. Knox we are indebted for the description of a new parasitical animal (*cysticercus cellulosæ*) inhabiting the human muscles.

Pathological anatomy does not seem to have been cultivated with much greater zeal than normal anatomy; in the former department, however, we have to notice an unique case of anterior spina bifida, which was related on the authority of an anonymous person, at the London Medical Society, and a very instructive case of ectopia cordis, by Dr. O'Bryen, from which may be derived several facts respecting the motions and sounds of the heart.

A sense of the importance of statistics as applicable not only to the various relations in which man is placed, but also to medical science, is daily gaining ground. This may be gathered from the various statistical communications of the highest value which are contained in the pages of this Journal for the preceding year.

The papers of Mr. T. R. Edmonds occupy the first rank, for the richness, variety, and value of the materials of which they are composed. A simple enumeration will at once show that we do not estimate too highly the contributions made by Mr. Edmonds to this department of science. They consist of communications on the influence of age and selection on the mortality of the members of the Equitable Life Insurance Society on the duration of life in the English peerage; on the mortality and sickness of soldiers engaged in war; and on the mortality and diseases of Europeans and natives in the East Indies. Mr. Farr has also furnished some valuable statistical observations on Benevolent Funds and Life Assurance, and an important document on the rate of mortality and expectation of recovery at different periods of the Asiatic cholera. Lastly, some points relative to the statistics of infantile disease have been cleared up by original tables, for which we are indebted to Dr. P. Hennis Green.

We have thus taken a rapid survey of the different facts and observations connected with medicine, of any importance, which have been published during the course of the year 1838. Our catalogue is, perhaps, imperfect, but it has been drawn up with conscientiousness and care.

There yet remains for consideration a topic, almost as important as the scientific one, we mean the medico-political aspect of the year 1838. It has been fruitful in events which touch the vital interests of the profession. The Poor-Law investigation has been brought to a close; the Irish Medical Charities Bill has once again been brought forward and withdrawn; the wrongs under which the profession labours have elicited an unexampled number of petitions to the Legislature for redress. These, and many other points of minor import, press upon our recollection, but they are matters too weighty to be treated of towards the close of an article.

SUPPRESSION OF QUACKERY.

Dr. Charles Cowan, of Reading, who fills the office of chairman of a Committee which has been appointed by the Provincial Medical and Surgical Association, with the professed purpose of "investigating the evils of Quackery, and suggesting the best means for its suppression," has recently addressed a letter (dated Sept. 14th) to the President of the British Medical Association, begging to be informed what a

"the intentions of that Association on the subject of empiricism. The Committee of the Provincial Society, according to Dr. Cowan, are "unable to co-operate with each other, from various circumstances," and the chairman, therefore, was naturally anxious to derive assistance from some other quarter, previous to putting forward a brief statement on the subject, in the forthcoming portion of a new volume of the "Transactions" of the Society. On the question of empiricism, "*if on no other*," Dr. Cowan says, the British Association and the Provincial Society "should be united," and he would regard it as a misfortune if his Committee were to "recommend one course while the British Medical Association advised another." With this feeling he has supplied the following outline of what he "believes to be essentially necessary for the effectual diminution of empiricism."

"1. The abolition of all quack advertisements and placards.

"2. The cessation of stamps.

"3. The declaring illegal all establishments for the *practice of medicine*, not conducted by qualified individuals.

"4. The appointment of district censors, whose duty it shall be to inflict medical penalties.

"5. The power of summarily punishing any individual who attempts to practise without a diploma.

"6. An easy local legislation.

"Petitions to this effect."

In reply to this communication, Dr. WEBSTER, expressed his willingness to co-operate with Dr. Cowan in the object alluded to, and stated the nature and extent of the labours of the British Association for the suppression of quackery, but pointed out the uselessness of attempting to combat the evil by *partial* legislation. He explained to Dr. C., that quackery was, in reality, "part and parcel of a numerous train of evils which had grown up and flourished under the supineness and misgovernment of the medical corporations," and that "applications to Parliament for *separate* Acts, for *various* grievances, which all proceeded from *one* source, would be alike unwise and impolitic." The President added—"Until a comprehensive measure of medical reform shall be carried into effect, I despair of putting down empiricism. *You* would only lop off a few of the topmost branches. *I* would lay the axe to the root of the tree. * * * Our intentions are, immediately, to take up the question of a NATIONAL FACULTY OF MEDICINE; carefully to consider and arrange its details; to solicit the opinions and co-operation of our medical brethren, and to get introduced, during the next Session of Parliament, such a measure as will unite the scattered members of our profession into one body, to be represented by a Council, chosen by themselves, and entrusted with full powers to regulate all professional matters. In this measure of general reform ample powers would be introduced to suppress quackery, so far as is possible, by some such plan as that mentioned in your letter."

CONDUCT OF GUARDIANS AT THE STOW UNION.

To the Editor of THE LANCET.

SIR:—Your correspondent, Mr. Fletcher Wilson, in a late number of THE LANCET, has given a very candid, and I have no doubt a very correct, statement of the pecuniary injury, he has sustained by the mal-operation of the New Poor-Law tyranny; his case is the case of hundreds, and like hundreds of his professional brethren, he has committed the mistake of putting the saddle on the wrong horse; in other words, he has attributed to the Board of Guardians acts and consequences for which the Poor-Law Commissioners are alone responsible. It is by and through the Commissioners that the profession has been so wantonly slandered, plundered, and insulted, and it is upon their heads that the phials of our *wrath* ought to be discharged. Boards of Guardians, what are they? With a few honourable exceptions, the willing or the unwilling tools of the Commissioners; still they are but *tools*; but some of the acts of the Commissioners merit our deepest reprobation. Well would it be for us if these men possessed only the power to injure our pecuniary interests; but it is so ordered, that our professional, as well as our private characters are often at their mercy. Let any man offend them, oppose their injustice, or expose their ignorance, and they will pursue him till they have hunted him to his destruction. In proof of the truth of this assertion, I beg permission to infringe upon your valuable columns, so far as to state my own case:—

When the Assistant Commissioners made their first appearance in this county, I believe the sapient and humane instructions they received were to throw every possible impediment in the way of the poor and destitute obtaining either parochial or medical relief; and, in order to reconcile them to the latter privation, the Assistant Commis-

sioners were directed to undervalue, and to hold up to ridicule and contempt, our professional services. If such were not the letter of their instructions, such was the spirit in which they acted.

Medical men were said to be "no better than old women." We were told "that we might get upon ten-pound horses, and ride from morning till night;" "that we were sharks;" and that "we had produced more pauperism by our extortions then any other class of society." One of the Assistants had even the unblushing effrontary to accuse me of having "fabricated a falsehood," *he well knowing at the time*, that a certain report of which he accused me of being the author, whether true or false, did *not* originate with me. Disgusted at the wanton insults offered to my profession, and indignant at the cowardly personalities perpetrated against myself, I memorialised Lord Melbourne. The effects produced by that memorial were instantaneous, and highly beneficial to my professional brethren; they were henceforth spoken of and treated with courtesy, and obtained much better terms than had previously been offered. One of the Assistant Commissioners rode off, and the other so completely altered his tone as to declare that "we were a most honourable and learned body of men; that he was proud of belonging to us, and that no one should speak ill of our profession in his presence."

The Commissioners, thus defeated, retired to meditate revenge. The first instructions given were to search the records of the hundred, to which I had been a surgeon nearly twenty years, to ascertain whether any complaints of neglect of duty had been preferred against me. But one solitary case, (a case of alleged neglect, which two or three malignants had trumped up and charged me with, but of which charge I had been acquitted at a General Board), could be produced against me. This case was, however, revived with a thousand additions and exaggerations, and, in direct violation of an existing *annual contract*, I was excluded, in the month of November 1835, from all share in the Union. To suit their own convenience I was, however, kept in ignorance of their intention to deprive me altogether of my parishes, and was suffered to continue my attendance until Christmas, when the following notice was sent to Mr. Barsham, one of the district surgeons:—

"Sir, I am directed to inform you, that the Guardians of the Stow Union have approved of your arrangements for having the assistance of Mr. Slayter, Mr. De Wint, Mr. Macintyre, Mr. Kent, and Mr. Freeman of Walsham, in your attendance upon the poor in the Woolpit district; but some further arrangement must be made for the attendance upon the poor of the Workhouse, as the Guardians do not approve of the attendance of Mr. Bedingfield on the poor of the Union. I am, Sir, &c."

Signed by the Clerk of the Union.

A similar notice was sent to Mr. Spencer Freeman. Thus did these men endeavour to blast my reputation, by proclaiming to the inhabitants of the thirty-two parishes in the centre of which I reside, that they did not think me a proper person to be entrusted with the care of the poor. To a respectful application to the Guardians to be informed of the reason for my dismissal, I received for answer that "they could assign no *reason*."

It will scarcely be credited, that thirty-two Englishmen, moving in a respectable sphere in society, could be found, at the dictum of others, to commit such an act, without being able or daring to assign "a reason" for such conduct. The motives of their masters, however, soon oozed out of the Star Chamber of the Union Bastile. My memorial to Lord Melbourne (which was the first and most compendious exposition of the miseries and injuries inflicted by the new White Slavery Bill) constituted the head and front of my offending. Fortunately both my private and professional character stood too high to be materially affected by the malice of my persecutors; but by taking away my parishes, they broke up my establishment as a medical school, thus inflicting upon me a loss of several hundreds per annum.

After considerable labour and expense I succeeded so completely in exposing and refuting the slanders and the falsehoods that had been circulated against me, that, at the next General Board the Guardians, for very shame, were compelled to give me back my parishes; nay, so frivolous and groundless were the pretexts for my dismissal, that even the Assistant Commissioner, who had previously vilified me, thought it "too bad," and had the manliness and the honesty, in round set terms to recommend the Guardians to reconsider their vote of exclusion. The scene which the board-room presented at that moment was worthy the pencil of a Hogarth. Had the conduct of this Assistant Commissioner upon a subsequent occasion, been equally open and ingenuous he would have done much towards the redemption of his character. This was to me a period of triumph; my triumph, however, was of short duration. In the month of August following I was again dismissed by the order of the Commissioners, not for any breach of duty, but because I dared, at the meeting at Manchester, to exhort the junior members of the profession, as they valued their own characters and the honour and respectability of their profession, not to seek to establish themselves amongst the connections of their elder brethren, through the instrumentality of the New Unions—not, in

fact to become the abject slaves of the Poor-Law Commissioners.

I find that I have already trespassed at great length upon your valuable columns, but I have yet much to say; particularly I wish to point out the best, and I believe the only remedy, for the evils under which the profession groans; this, however, I must reserve for another opportunity. In the mean time I remain yours, very respectfully,

J. BEDINGFIELD.

Stowmarket, Suffolk, Aug. 18, 1838.

VEGETABLE CHEMISTRY.

To the Editor of THE LANCET.

SIR:—The following experiments, illustrative of the constituents of gooseberries, at different periods of their growth, have been conducted during the present summer, and if worthy of notice, you will oblige me by inserting them in your valuable Journal. I am, Sir, your obedient servant,

SAMUEL WRIGHT.

Nottingham, Sept. 11th, 1838.

Experiment 1*st*.—Some unripe gooseberries, collected about the latter end of June, were carefully beaten to a pulp, and then acted upon by successive portions of alcohol, until everything soluble in that menstruum was removed. The several alcoholic solutions, after intermixture, were subjected to slow evaporation. When all the spirit had disappeared there remained a small quantity of sour fluid, tinged green by the colouring matter of the fruit. This liquid was diluted with five times its volume of distilled water, and after standing for some time, was filtered, to separate the colouring matter, which had wholly subsided. The clear fluid was then divided into four equal parts, and examined in the following manner:—

To the first portion was added sulphate of iron, when a dark brown colour immediately resulted, which had every appearance of malate of iron.

The second portion was treated with acetate of lead until it ceased to occasion any turbidity. When the deposition was completed, a little more water was added, and the mixture heated to ebullition. After boiling for two or three minutes the whole of the precipitate was redissolved; it was then filtered, and set aside to cool. In about an hour, the inside of the glass displayed a beautiful arrangement of minute crystals of extreme whiteness. These crystals were collected, dried on bibulous paper, diffused through distilled water, and then decomposed by sulphuric acid. The sulphate of lead was allowed to settle, and the liquid, after filtration, was tested with sulphate of iron, when the characteristic brown colour again resulted.

The third portion was tested with nitrate of silver. On the addition of this salt a darkish precipitate was obtained, soluble in boiling water, out of which it crystallised on cooling in shapeless particles that were nearly black from the reduction of oxide of silver.

The fourth part, by digestion in nitric acid, on a sand bath, and a heat of 130°, was totally converted into oxalic acid.

The residue left by the alcohol, indicating no traces of acidity, was boiled in repeated portions of distilled water, until all the soluble matter was removed. The solutions, after being mixed and concentrated, were suffered to cool, when a small quantity of bitartrate of potass was deposited, and the liquid on examination displayed all the characteristics of gum.

The matter left by the boiling water was small in quantity, soluble in liq. potassæ, and, to all appearance lignin.

Experiment 2*nd*.—Some gooseberries were gathered before they were fully ripe, having a bright red instead of a deep claret hue, and after due crushing were boiled in repeated portions of strong alcohol. The alcoholic solutions were intermixed, allowed spontaneously to evaporate, and the residual matter redissolved in distilled water. Acetate of lead was then added so long as any precipitate was obtained, by which means all the malic acid was thrown down. The liquid was then filtered, and set aside to evaporate. The produce of evaporation was a thick fluid, of a very sweet taste, and not disposed to crystallise: but after exposure in a vacuum, the microscope discovered an arrangement of shining particles, and I have no doubt that by careful management distinct crystals of sugar might be obtained. At all events, the experiment proves the existence of sugar in the fruit at this period of its ripening, whilst in the immature state not a particle was found. A quantity similar to that used in Experiment 1, was employed to ascertain the proportion of mucilage, and on examination there did not appear to be above half the weight. Another selection was also made, and examined as in Experiment 3, but so small a trace of alcohol was obtained, as scarcely to justify a belief in its independent existence.

Experiment 3*rd*.—A quantity of gooseberries was collected at the time when they appeared to be fully ripe, and after careful bruising were diluted with half their weight of distilled water, agitated, and then allowed to settle. During this time the vessel containing the fruit was immersed in water cooled down to 46°, so that no change could result from the influence of heat. Without such precaution it is obvious that the experiment would have been faulty. When the husks and denser portions had subsided, the supernatant fluid was care-

fully skimmed off, introduced into a glass vessel with a narrow neck, and then saturated with carbonate of potass. When the saturation was completed, the fluid swimming at the top was removed with a delicate pipette, and dropped upon a bit of camphor placed on a slip of glass under a magnifier. On looking through the microscope a sort of vibratory motion was discovered, the camphor rapidly dissolved, and in a few seconds the spirit had evaporated, leaving a thin lamina of camphor over the whole extent of surface previously traversed by the fluid.

Another quantity of gooseberries of the same age was collected, bruised, and submitted to distillation *in vacuo*. The distilled fluid, after saturation with carbonate of potass, furnished a liquid which dissolved camphor, burnt with a blue flame, and exhibited all the characteristics of alcohol.

These experiments I have many times repeated, and with similar results. I also examined some specimens of gooseberries at this age, to discover their proportion of sugar, and invariably found it very sensibly less than that contained in them a fortnight before. Malic acid was also present, but it was small in quantity.

Experiment 4th.—Some gooseberries that had passed the period of maturity were submitted to very careful analyses, but neither sugar nor alcohol was discovered; acetic acid and mucilage being the predominants.

These experiments appear to justify the following inferences:—1st. In the unripe state, gooseberries consist chiefly of mucilage, lignin, malic acid, and bitartrate of potash. 2nd. When they have nearly arrived at maturity, they contain an abundance of sugar, its presence being attended with a diminution in the quantity of gum, part of this substance having been converted into sugar. 3rd. When they are completely ripe, their components are more numerous than at any other time; sugar and alcohol being additional to the constituents of the unripe berries. 4th. After the period of maturity is past, their composition again becomes simple, the only appreciable matters being lignin, mucilage, and acetic acid.

Now, it will be obvious that some of these constituents are formed by vital, and some by chemical processes. When a gooseberry is first formed, it is by the exudation of a little mucilaginous fluid at the extremity of the stalk, that afterwards attaches it to the tree. Through this fluid, inspissated by warmth and air, delicate fibres ramify in all directions, proceeding from the stalk, their origin, and terminating at the opposite extremity. These fibres interlace, and supported by the mucilage, which serves at once for their matrix and sustenance, at last form a perfect boundary, by which a defence is provided, and from which a considerable secretion is obtained. These fibres are lignin, the bed through which they ramify is gum. These are the only substances of which a rudimental gooseberry consists, and both are the produce of vital action.

In the next stage malic acid is formed, which is also a vegetable secretion; and, whatever may be the origin of the potass, there is no doubt of the tartaric acid being a vegetable product. As the period of maturity arrives sugar is formed. Now, when we remember that the best analyses agree in assigning nearly the same constituents to sugar as to gum, making them isomeric, we require no direct chemical action, but merely a little variation in the functions of vegetable life to render the gummy matter saccharine. A little longer and alcohol is generated. Now, though it is certain that sugar is susceptible of a ready conversion into spirit, it must be remembered that the only chemical means is by fermentation, during which action the intestine movement is great, the heat much augmented, and the escape of gas voluminous; any of which processes would be incompatible with the correct maintenance of vital function, whilst their combined influence would undoubtedly prove its destruction. The great thickness of inspissated mucilage which lines the cortex of a gooseberry, would exclude the atmosphere too completely to allow fermentation to proceed; or, admitting its possibility, such mucilaginous texture, aided by the firm covering of lignin, would never admit the escape of any gas that might be formed, and rupture would consequently always accompany ripening. Besides, as chemical action, which is always attended with disorganisation or decomposition, cannot proceed conjointly with the healthy functions of vegetable life, it follows that the alcohol must be formed by a vital and not by a chemical process.

I am further inclined to this opinion from having been unable to discover the slightest trace of alcohol in gooseberries gathered when sugar only was present, and allowed to stand in the sunshine until those which remained on the tree were distinctly impregnated with spirits, and it has only been by a considerable elevation of temperature that I have ever been able to procure spirit from such berries.

At this period, which is the state of perfect maturity, the proportion of malic acid is small, not one-third of that contained in the immature state; and I am inclined to the opinion, that it is either some change in the composition of the malic acid, or a peculiar combination formed between it and the mucilage, which will at once account for its apparent absence and the colour of the fruits. In the next stage we find different appearances and results. The vessels which carried on the circulation between the parent tree and its dependent berry are now oblite-

rated, vital action ceases in the fruit, and chemical changes supervene. The thick layer of mucilage lining the husk breaks down, and softens into a loose pulp,—the husk becomes thin and permeable, absorbs oxygen, and rapidly decomposes. It requires only a slight alteration in the constituents of the alcohol, and vinegar is formed directly. Thus, 1 eq. of the former, consisting of 4 c.+6 h.+2O, if added to 4 eq. of oxygen, produces 1 eq. of acetic acid = 4 c. +3 h.+3O and 3 eq. of water. This is a change which may be explained by theory, but which is equally substantiated by experiment, for when the alcohol disappears vinegar and water invariably supply its place.

The presence of alcohol in ripe fruit is rather a remarkable circumstance, and I am not aware of its having been described before. But in the mode of investigation which I have adopted (precisely as described in this paper), I do not think that any mistake could arise, or the spirit have been a *product* instead of an *educt*. Had I employed ordinary distillation the alcohol, as long since shown by Gay-Lussac, would have been much more abundant, the greater part of it being formed *during* and not *prior* to the distillation. But by distilling *in vacuo* that inaccuracy is obviated; and by separating the alcohol without any distillation whatever, an additional proof of its existence is furnished.

I think it not improbable that future investigators will detect spirits in most fruits, and I am far from thinking that their flavour does not in some degree depend upon it; at least this idea applies to gooseberries, for when they are sweetest to the taste, the quantity of sugar which they contain is greatly less than when their flavour is not nearly so saccharine. They, however, very readily part with their spirit. Thus, when berries are first collected their flavour is exceedingly full and generous, but if allowed to stand for some time they acquire a dead and insipid taste; there is a sweetness, but the full rich flavour is gone,—the spirit has evaporated, for analysis conducted 48 hours after they have been gathered discovers none. If, again, ripe gooseberries be subjected to heat, they have a strong tendency to become acid, apparently without being previously converted into alcohol; thus, however sweet such fruit may be upon the tree, it becomes insupportably sour by baking. But if a little sugar be first added it prevents acidification, and disposes the formation of a considerable proportion of alcohol. Hence the superiority of fruit pies which are sweetened before cooking, the flavour being dependent not so much upon the sugar as the spirit to which its presence gives rise. The addition of even a trifling quantity of alcohol before baking still further improves their flavour, for it encourages the formation of such a quantity of spirit as will sometimes indicate its presence by its effects.

CÆSAREAN SECTION AND EMBRYOTOMY.

To the Editor of THE LANCET.

SIR:—Your Journal of August 11 contains an article by Mr. Hare, recommending Dr. D. Davis's osteotomist as a substitute for the Cæsarean operation. To Mr. Hare's letter you have appended some observations tending to correct misconceptions existing in his mind, relative to the fatality of the operation, and the comparative safety with which Dr. Davis's instrument may be used.

It has never been my lot to witness the Cæsarean section, nor to be able to form an opinion of the proposed substitute, but I have seen an instrument which, judging from the result of the cases in which it has been used, would seem to offer the best prospect of superseding a severe and dangerous operation. The instrument to which I refer is one invented by M. Baudelocque, of Paris, and called by him the cephalotribe. The instrument is a forceps, with a powerful screw, by means of which the blades, after having been securely locked, are brought together with a force which crushes anything resisting their approximation. The blades are introduced in exactly the same manner as those of the forceps, and when they are fixed the handle of the screw is turned, and the child's head crushed. M. Baudelocque proposes his instrument as a substitute for the crochet and perforator, as being free from any chance of injuring the maternal structures, by splintering the bones, or by loosing their hold. In his opinion the Cæsarean operation is now no longer necessary, except when the child is alive, in which case, like the other French accoucheurs, he would not sacrifice the child, but would operate for its extraction. The distance between the blades, when closed, is but twenty lines, so that the instrument can be introduced even in cases of extreme pelvic distortion. I have seen children's heads, even after they have lived a month, crushed with the utmost facility, and thus there can be no doubt as to the power of the instrument to effect what it proposes. I have never seen any splintering whatever of the bones, or laceration of the scalp, and thus we have some guarantee for its safety. M. Baudelocque has used the cephalotribe in seven cases, and MM. Paul Dubois, Barbelle, Aîné, and Rivallié, have employed it in four others. In all these cases the Cæsarean operation had been declared absolutely necessary by men of the highest rank in obstetrics, and in all the use of the instrument saved the life of the

mother. The weight of the instrument is five pounds and a half, and its length is rather more than the common long forceps. By giving insertion to this notice, you will oblige, Sir, your very obedient servant,

JN. C. COOKE, M.D.

Coventry, Sept. 6, 1838.

DISEASES OF THE URINARY ORGANS.

CASE 1.—*Repeated hæmorrhage from the bladder.—Tannin employed in injections.—Cure.*

General G., 65 years of age, originally of good constitution, had suffered considerably from intermittent fever, which frequently resisted the use of quinine. In 1835 he passed for the first time some clots of blood in his urine, and a slight hæmorrhage took place from the urethra. These symptoms reappeared from time to time, and were accompanied with little uneasiness other than that occasioned by the coagula becoming engaged in the neck of the bladder. In January, 1836, M. Devergie passed a catheter into the bladder, and could discover nothing in the viscus; the neck of the bladder, however, and the urethra were extremely sensitive. During the course of 1836 the General passed a few coagula, but without hæmorrhage, on three different occasions.

In the month of November 1837, he was exposed to a cold, moist atmosphere, which produced a discharge of blood amounting to seven or eight ounces in three days. A few emollient and narcotic injections were thrown into the urethra.

In February, 1838, the hæmorrhage again returned in greater quantity, and was accompanied by violent pain in the urethra occasioned by the difficulty of passing the clots through the urethra.

In March, 1838, blood was again discharged in considerable quantities through the urethra, and the patient was very much reduced in strength.

On the 19th of April the patient was imprudent enough to expose himself to a moist cold air, which gave rise to an alarming degree of hæmaturia, accompanied by strangury. The strength of the patient was thus very much reduced; the digestive organs became deranged; nausea and vomiting were frequent; the pulse small, accelerated, syncope, &c.

April 20th, M. Segalas was consulted, and having sounded the bladder without discovering any trace of foreign body, considered the case to be an extremely dangerous one. M. Devergie now proposed frequent injections into the bladder composed of decoctions of Bistort root and bark; by these means the state of the patient was much improved in a couple of days; the discharge of blood, though less in quantity, still continued.

April 24. Fresh injections were thrown into the bladder with the addition of red wine, containing twenty grains of tannin for every four ounces; these immediately stopped the hæmorrhage. They were therefore continued for several days, until they began to produce pain in the region of the bladder. The coagula, of various sizes, were evacuated by means of a large catheter, and by washing out the bladder.

May 30. The discharge of urine had been perfectly limpid and free from coagula, when the patient passed several lacerated portions of fibrinous matter, which seemed to have formed part of a polypus not larger than a nut. From this moment his strength returned, and he went to the country perfectly cured.

Remarks.—In this case the hæmorrhage was arrested by cold injections containing tannin. It is not easy to determine the cause upon which the loss of blood depended. Was it idiopathic or produced by the presence of a tumour in the bladder, which was detached by the action of the tannin? Were the portions of matter, passed some time after the cessation of the hæmorrhage, nothing but fibrine coagulated by the tannin, or the remnants of a polypus? The great difference in form, size, and consistence in the coagula which were passed a few days before, rendered the existence of a polypus probable.

CASE 2.—*Stricture of the urethra.—Dilatation of the Canal.—Idiopathic hæmaturia.—Injection of iced-water.—Cure.*

M. R., 56 years of age, had been treated for stricture of the urethra, which had commenced two years before, and was the result of neglected inflammation. The stricture was attended with incontinence of urine from over distention of the bladder; the patient made water from ten to fifteen times a day, five or six times during the night; and was troubled with constant dripping of the fluid.

From the 25th of July to the 15th of August he was treated by the introduction of bougies and Mayor's sounds, through which the stricture and incontinence of urine were entirely removed.

On the 15th of August the patient complained of pain in the hypogastric and hypochondriac regions; of general fatigue and lassitude; a few drops of blood were mingled with the urine, which was passed frequently.—Hip-bath; cataplasm to the abdomen; opiate pills.

16. The patient was seized with violent hæmorrhage, and lost no less than twenty to twenty-four ounces of blood mixed with urine in two hours. The surgeon in attendance immediately applied cold acidulated lotions to the hypogastrium and perineum; the discharge of blood was moderated by

the cold, but continued from seven o'clock in the evening of the 16th, until four o'clock of the 17th A.M., when it recurred with increased violence. The patient's strength was now greatly reduced; the pulse small and frequent. Bladders filled with ice were placed over the pubis, and injections of six ounces of iced-water were thrown into the bladder; these were repeated thrice consecutively, and allowed to remain in for five minutes at a time. By these means the hæmorrhage which threatened to be fatal, was arrested. After the lapse of some time a fresh injection of iced water was thrown in and allowed to remain for ten minutes. Since then the discharge of blood did not reappear, and under the use of cooling drinks, diet, proper position, &c., the patient was gradually restored to health.—*French Lancet*, Sept. 6, 1838.

CHLORATE OF POTASS IN CROUP.

Dr. Klein assures us that he has found the chlorate of potass extremely useful in dangerous cases of croup, particularly towards the termination of the disease. He administers it in the dose of three grains every four hours, to children of two years old. The fits of coughing soon become more mild under the use of this remedy; a profuse perspiration breaks out; the child falls asleep and gradually recovers.—*Siebold's Journal.*

HOPITAL COCHIN.

CASE OF ILEUS AND GASTROTOMY.

By M. Ducros, *Interne.*

A. R., servant, 25 years of age, never having had children, experienced from the time of her infancy pains in the epigastric region, which recurred two or three times a year. These pains, which were once extremely violent, diminished gradually, but continued for an hour to an hour and a half at a time; they were followed by vomiting of the *ingesta*, and occasionally of bilious matter. Two months ago the symptoms became more marked. She was first attacked by pain in the epigastric region, which on the following day passed to the other side of the abdomen, and was attended with colic and diarrhœa, but no vomiting. On the third day after this attack a hard, voluminous tumour made its appearance near the ileo-cœcal region; there was constant diarrhœa during two months, at the end of which the patient vomited frequently either her food, or a green, transparent fluid, and the diarrhœa was replaced by constipation, occasional accesses of fever, and shivering. She came into the hospital on the 8th of May, 1838. The symptoms then observed were an ovoid tumour occupying the ileo-cœcal region; it is hard, not tender, fixed, and measures 3½ by 2½ inches; nothing abnormal is discovered by examination through the rectum or vagina. As the symptoms already described continued unabated, from 20 to 30 leeches were applied on three several occasions to the tumour and anus, and as the patient's bowels were obstinately constipated, enemata and purgative medicine were administered, but without any effect.

On the 23rd the state of the patient became still further aggravated, and a quantity of stercoraceous matter was rejected by vomiting. A pill containing croton oil produced several evacuations, followed by alleviation of the pain, and diminution of the tumour.

June 1, 2, 3. Constipation has replaced the diarrhœa; purgative enemata produce no effect; acute pain of the abdomen; vomiting of bilious and fæcal matter. A pill containing two drops of croton oil is administered.

4. The vomiting continues; pain less; no stool; urine passed with facility; pulse natural; skin cool.—Ice over the tumour; a croton oil pill; iced-water enemata.

5. Lips dry; tongue moist, coated white; no vomiting; abdominal pain less, but frequent colics; hiccup; general sinking. A large quantity of water was thrown up into the intestine, and then withdrawn by the double syringe; it came away perfectly clear.

M. Monod, surgeon to the hospital, having been now consulted, determined on performing gastrotomy. An incision of between two and three inches in length was made along the right side of the abdominal parietes, which were divided in layers; on arriving at the peritoneum this membrane also was divided, on which some serum escaped; a portion of the large intestine immediately presented itself at the wound; it was pushed back, and the finger having been introduced deeply into the abdominal cavity recognised a hard mass behind and above the cœcum. M. Monod now drew out another portion of intestine, which, on being examined proved to be the small intestine; it was red and tumefied, but not tender; he divided it with a scissars to the extent of an inch and a half, and gave exit to a considerably quantity of fæcal matter, productive of great comfort to the patient. A ligature was passed through the mesentery, and fixed with strips of diachylon, simple dressing and a bandage being applied over the whole.—Opiate draught; leeches if necessary.

6. The bit of intestine has returned into the abdomen; it was fortunately discovered, and fixed more carefully than before; fifty leeches have been applied. The patient is

much exhausted; pulse small, feeble; face purple; no vomiting.—Opiate draught; frictions with mercurial ointment over the abdomen; twenty leeches.

7. Extremities cold; face purple; vomiting; frequent hiccup; abdomen tumid and tympanitic, painful; respiration short, oppressed; pulse insensible; copious discharge of fæcal matter through the wound. The woman died in a few minutes after the visit.

Examination twenty-four hours after Death.

Peritoneum vascular; the abdominal cavity contains a quantity of sero-purulent fluid; there is but slight adhesion between the gut and parietes of the abdomen. The intestine had been divided at eight or nine inches above the cœcum. The obstacle to the passage of fæcal matter was now sought for, and found at the junction of the cœcum and colon; the former was so contracted as scarcely to admit the point of a female catheter; at this place the intestine was closely adherent to a mass of scirrhous matter which was attached to the pelvis. The small intestine, for a short way above the cœcum, was inflamed. The other viscera were healthy.—*Arch. Gen. de Med.*, August, 1838.

The operation of gastrotomy in the case which we have just recorded, appears to have been a bold proceeding, but we think that it was fully justified by the circumstances in which the patient was placed. Death was imminent; there remained the doubtful chance of an operation, and the surgeon did not hesitate to adopt the only course, though a dangerous one, which presented a prospect of saving his patient. It must, however, be confessed that many of the most eminent physicians and surgeons reject the operation altogether on the grounds of the uncertainty of the symptoms of ileus and of its precise seat. But in the present case the existence of a tumour in the ileo-cœcal region indicated with sufficient precision the seat of the obstruction, while the general condition of the patient was not such as to contraindicate an operation. The late Baron Dupuytren once performed gastrotomy, but without success, in a case of ileus; on the other hand, in a memoir presented to the Royal Academy of Surgery, Hevin mentions fifteen cases of the same disease, in two of which gastrotomy was performed with success.

CASE OF

PRIMARY LARYNGO-TRACHEITIS.

By MARTIN H. LYNCH, *M.D.*, *and* WILLIAM DAWSON, *Esq.*

THE following is an example of croup occurring in the adult person:—

Mrs. H., aged 28 years, in the eighth month of pregnancy, having been engaged in washing a very warm room on Wednesday, the 9th of May, and having, while heated, imprudently exposed herself to a current of cold air, attributed to this circumstance some slight bronchitic symptoms which appeared on the following day, and continued for about forty-eight hours, when there were superadded uneasiness, almost amounting to pain, in the anterior part of the neck, sibilous respiration, great dyspnœa, high fever, &c. We were not called upon till the 15th. Mrs. H. had been, up to our visit, under the care of a druggist, who had merely administered a purgative, and applied a few leeches to the throat.

May 15, 11 o'clock, A.M. Skin hot; countenance pale, but tumid and anxious; thirst (cold water being preferred); bowels not freed since the day before yesterday; tongue moist, furred; region of the larynx painful on pressure; deglutition very difficult; pulse 124, hard, and resisting, although small; great dyspnœa; whispering voice; sibilous and difficult inspiration; cough, which sometimes occurs in paroxysms, when it is "barking" (to use the expression of her mother, who is in attendance upon her); darting pain on the right side of the chest since morning; expectoration viscid, of a yellowish green; her mother states that before we had seen her, she had coughed up a tough flat substance of an irregular form like a piece of skin; internal fauces and pharynx in a natural state.

On examining the chest we found the sound, on percussion, clear; *no abnormal sounds* were heard on applying the stethoscope, but it was equally impossible to hear the murmur of respiration, in consequence of the loudness of the laryngeal râle, and probably on account of the weakness of respiration, resulting from the obstruction in the glottis. The pulling forward of the tongue *was not productive of pain*. We endeavoured to get a view of the epiglottis, but failed, the attempt always giving rise to a paroxysm of dyspnœa and coughing; we found that her mother's description of the character of the cough during the paroxysms was perfectly correct, it was "barking," and at the same time ringing and clangous.

The treatment consisted in the application of leeches to the region of the larynx; the administration of purgative enemata; the exhibition of the following solution of

tartarised antimony, to be given in half-ounce doses, so as to maintain nausea, and excite moderate vomiting.

℞ *Tart. of antim.*, gr. iij;
Distill. water, ℥viii.

Mercury was ordered by way of inunction into the axilla, and a large blister to be applied, *inter scapulas*, and to extend to the nucha. A draught containing five drops of Battley's sedative solution to be given every three hours.

The patient was visited at intervals of three hours at the most; there was nothing new observed until three o'clock, except that the signs of fœtal life had disappeared; at half-past three o'clock she stated that her breathing was performed with more ease, especially after vomiting; turns in the bed without assistance or much difficulty; expectoration copious, paroxysms of threatened suffocation fewer; the bowels have been once freely moved.

Repeat enema; continue medicines.

This improvement continued until four o'clock, A.M., on the 16th, when suddenly she was attacked with paroxysms of dyspnœa of unusual severity, which quickly recurred until she expired at 7 A.M.

Necropsia, twenty-nine hours after Death.

The neck was very short; when the trachea was exposed we were struck with its very small calibre; indeed it might, in this respect, be compared to that of a child.

The mucous membrane covering the epiglottis was vascular, especially towards the base, and was covered posteriorly, *i. e.* on its laryngeal surface, with a yellow, viscid, puriform matter; the epiglottis was erect, hard, and wonderfully thickened, representing one-fourth of a *sphere* instead of a *plane*.

The larynx and trachea were split open posteriorly along the median line, the internal surface of the larynx was covered with a viscid, ochre-coloured, puriform matter. The trachea was lined with a buff-coloured membrane, nearly as thick as the rings of the trachea, and extending to the bifurcation of the bronchi; it formed a perfect cylinder, except at one point posteriorly, and at the lower part of the trachea, where there was a longitudinal deficiency; the cylinder of false membrane was free inferiorly, it was adherent above.

The larynx was lined with a thin filmy continuation of the tracheal false membrane; this filmy membrane was shreddy at some points, through which it seemed to give exit to the ochre-coloured matter. The mucous membrane of the trachea, where the detachment of the false membrane left it visible, was found highly vascular. The folds of the membrane forming the edges of the glottis were hard and swollen, the ventricles of the larynx were hardly visible, being nearly obliterated by the inflammatory thickening and exudation.

The lungs exhibited sanguineous congestion even at the superior part, but were soft, crepitating, and the blood was easily expressed. The bronchial tubes exhibited an inflammatory injection below the termination of the false membrane, but on following up their dissection, we perceived that the vascularity gradually disappeared as we approached the smaller tubes, and ultimately disappeared altogether, the mucous membrane being in a perfectly natural state. In ascertaining the existence of vascularity, we did not omit careful washing in order to distinguish between inflammatory injection, and mere colouring produced by the blood effused during dissection.

No appearances were found in any other part of the body sufficient to account for death.

The larynx, trachea, and as much of the pharynx and fauces, as a hurried dissection allowed us to remove, have been carefully preserved by one of us (Mr. Dawson), and the preparation has been placed in the museum of the Newcastle-upon-Tyne School of Medicine and Surgery.—*Dublin Journal.*

This case was clearly one of simple, uncomplicated inflammation of the larynx and trachea; during life we ascertained that the fauces and pharynx were quite free from disease, a fact confirmed by dissection.

The distinction between uncomplicated or *primary* croup, and *secondary* croup, or that which is consecutive upon affections of the fauces and pharynx, is one of great importance, inasmuch as the former is always attended with sthenic symptoms, but the latter generally with symptoms of an asthenic character. The credit of making this division is due to Dr. Copland and Dr. Stokes.—(Copland's Dictionary, 1835, Art. Croup; and Stokes on Diseases of the Chest, Dublin, 1838.)

That *primary* croup, leading to the formation of a false membrane, is an extremely rare disease in the adult, may be inferred from the fact, that Dr. Stokes, notwithstanding his great talent, experience, and research, has been able to bring forward but one case of it.

The circumstance of no pain being produced by drawing forward the tongue, seemed to point out that the epiglottis was not much affected; nevertheless, dissection showed that it had been intensely inflamed.

Although we endeavoured to avail ourselves of every remission of the symptoms, the use of the stethoscope led to no results, whether we applied it to the thorax or over the trachea.

We consulted upon the propriety of performing the operation of tracheotomy, but determined against its expediency. First, because without any *leading question* having been asked, we had been told, that some false membrane had been coughed up. Secondly, because the cough was very different from that of pure laryngitis, being, on the contrary, like that of croup, clangous, ringing, and as it were metallic.

UNIVERSITY COLLEGE HOSPITAL.

TREATMENT OF VARIX.

E. H., aged 25, a lady's maid, was admitted June 21, under the care of Mr. Liston. About six years ago, during the time she was travelling, her left leg became frozen, and was afterwards suddenly exposed to considerable heat, by the limb being immersed in a mash-tub. In consequence of this treatment the veins of the leg became varicose, and the limb flexed at the knee-joint. This state of flexion continued for some time, when it was overcome by main force, and the limb was moved with freedom. She has had recourse to a variety of treatment under various surgeons without experiencing any relief. On her admision the veins of the leg were much enlarged, and there was a small ulcer on the inner ankle.

July 25. Mr. Liston passed eight needles under the principal varices and applied twisted sutures. The ulcer soon healed and the veins ceased to appear enlarged.

30. Three of the needles were removed to day; the other five on the 31st. Water-dressing applied.

August 4. The leg bandaged to day. Went on well till the 16th, when she was discharged cured.

BRITISH MEDICAL ASSOCIATION.

Sept. 18, 1838.

Robert Innerarity, Esq., of Baldock, Herts, was elected a member.

A report from the Branch Association at Stroud was read, and was highly satisfactory. The Stroud branch already numbers fourteen members, Dr. Wilmot is the President.

A communication was also read from Mr. Bedingfield, of Stowmarket, relating to, and severely commenting on, the proceedings of the Poor-Law Commissioners in that neighbourhood.

Communications were also read from Dr. Maunsell, of Dublin, Dr. Cowan, of Reading, and Mr. Massy, of Nottingham.

It was moved, seconded, and carried, that a class of corresponding and honorary members be instituted.

The remaining portion of the evening was devoted to the subject of the forthcoming anniversary. It was determined that an annual oration should be delivered on the anniversary of the Association; the subject chosen for the present year was that of *Medical Reform*, and Dr. Granville was appointed orator.

MEDICAL SOCIETY OF LONDON.

The Society held its first meeting for the session on Monday evening, and notwithstanding the unfavourable state of the weather, there was a full attendance of members. An elaborate paper on "Club-foot" was read by Dr. Little, an abstract of which we may probably find room for next week.

REGULATIONS OF APOTHECARIES' HALL.

In the abstract of the Regulations of Apothecaries' Hall, published in our last Number, we omitted to mention that two courses of lectures on midwifery and diseases of women and children should be attended in *separate* sessions, and *subsequently* to the first summer session. This is the only change which the Society of Apothecaries have made in the curriculum for 1838. We had sent to "the Hall" for a copy of the new regulations, but received for answer that none had been published since last year.

CORRESPONDENTS.

The letters signed "Robert Lynch, M.D.," cannot appear in our columns. That the wholesale slaughterer should be defended by the advocate whom he has hired, is not surprising, but it is somewhat extraordinary that so cunning a quack should engage a scribe who cannot put pen to paper without displaying the grossest incompetency to execute the commonest duty of a literary hack. Not a single sentence of either of his present productions contains two lines grammatically constructed. As for his arguments and reasonings, they are especially distinguished by ignorance and mental imbecility, and almost deserve preservation for these qualities.

A Constant Reader, Exeter. Such an apprenticeship will not qualify for the examination.

Amicus Justitiæ. Unless the inquest involved points of medical inquiry, a notice of the proceedings would be foreign to our Journal. Ample publicity might be secured in some other metropolitan Journal.

The Shrewsbury and Nottingham newspapers have reached us.

The communications of *Mr. Samuel*, *Mr. Rayner*, *Mr. Rogerson*, and *Mr. Edward Thompson* (whose letter was correctly addressed), have been received.